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BOARD OF LAND AND NATURAL RESOURCES

STATE OF HAWAI'I

IN THE MATTER OF

Contested Case Hearing Re Conservation
District Use Application (CDUA) HA-3568 for
the Thirty Meter Telescope at the Mauna Kea
Science Reserve, Ka'ohē Mauka, Hāmakua,
Hawai'i, TMK (3) 4-4-015:009

Case No. BLNR-CC-16-002

THE UNIVERSITY OF HAWAI'I AT
HILO AND TMT INTERNATIONAL
OBSERVATORY, LLC'S JOINT
RESPONSE TO CINDY FREITAS'
PROPOSED FINDING OF FACT,
CONCLUSIONS OF LAW, DECISION

DEPT OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

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**THE UNIVERSITY OF HAWAI‘I AT HILO AND TMT INTERNATIONAL
OBSERVATORY, LLC’S JOINT RESPONSE TO CINDY FREITAS’ PROPOSED
FINDINGS OF FACT, CONCLUSIONS OF LAW, DECISION ORDER
FILED MAY 30, 2017 [DOC. 672]**

Applicant UNIVERSITY OF HAWAI‘I AT HILO (“UH Hilo) and TMT INTERNATIONAL OBSERVATORY, LLC (“TIO”), through their respective counsel, hereby jointly submit this Response to Cindy Freitas’ *Proposed Finding of Fact, Conclusions of Law, and Decision and Order*, filed May 30, 2017 [Doc. 672] (“Response”).

I. STANDARD OF REVIEW FOR REVERSAL OR MODIFICATION OF ADMINISTRATIVE FINDINGS, CONCLUSIONS, DECISIONS, OR ORDERS

To prevent judicial reversal or modification of administrative findings of fact under § 91-14(g), Hawaii Revised Statutes (“HRS”), the Board of Land and Natural Resources (“BLNR”) should, upon review of the record, reverse or modify findings that are “[c]learly erroneous in view of the reliable, probative, and substantial evidence on the whole record.” *In re Gray Line Hawaii Ltd.*, 93 Hawai‘i 45, 53, 995 P.2d 776, 784 (2000). A finding of fact is clearly erroneous when: (1) the record lacks substantial evidence to support the finding or determination, or (2) despite substantial evidence to support the finding or determination, the BLNR is left with the definite and firm conviction that a mistake has been made. *Kienker v. Bauer*, 110 Hawai‘i 97, 105, 129 P.3d 1125, 1133 (2006) (citations omitted)

Similarly, conclusions of law should be reversed or modified where the BLNR finds they are in violation of constitutional or statutory provisions, in excess of the statutory authority or jurisdiction of the Commission, or affected by other error of law. *Id.*

II. DISCUSSION

A. Responses to Cindy Freitas' ("C. Freitas") Proposed FOF and COL

The UH Hilo and TIO object to each of the FOF and COL in C. Freitas' *Proposed Findings of Fact, Conclusions of Law and Decision and Order* ("C. Freitas' Proposed FOF/COL") to the extent that they are irrelevant, inapplicable, immaterial, mischaracterize the evidence, misstate or misrepresent the record, rely on evidence that is not credible, biased, or incomplete, and/or not supported by the evidence. UH Hilo and TIO also object to the C. Freitas' Proposed FOF/COL to the extent they assert alleged "findings" that are beyond the scope of issues set forth in Minute Order No. 19.

Appendix A contains general objections to the C. Freitas' Proposed FOF/COL, which UH Hilo and TIO hereby incorporate by reference to its response to each of C. Freitas' FOF and COL, to the extent applicable.

In addition to the general objections in Appendix A, UH Hilo and TIO have prepared a table of specific responses and objections to C. Freitas' proposed FOF and COL, which is attached hereto as Appendix B. Citations to the evidence in the record provided herein are not intended to be exhaustive or comprehensive, but demonstrate evidentiary support for UH Hilo and TIO's responses and objections.

The UH Hilo and TIO further object to C. Freitas' Proposed FOF/COL to the extent they seek to challenge the FEIS for the TMT Project. This proceeding is not an EIS challenge under HRS Chapter 343; C. Freitas' ability to make such a challenge expired long ago, and she cannot reopen the FEIS approval process through improper arguments of insufficiency under the statute and rules governing the EIS process. This proceeding is entirely governed by the applicable constitutional law and the Conservation District rules that are genuinely at issue here.

The FOF/COL and page numbers referenced herein follow those as provided in C.

Freitas' Proposed FOF/COL References to the UH Hilo and TIO's Joint [Proposed] Findings of Fact, Conclusions of Law, and Decision and Order on May 30, 2017 [Doc. 671] ("UH-TIO FOF/COL") are denoted by the prefixes "UH-TIO FOF" and "UH-TIO COL" for the numbered FOF and COL, respectively, in the UH-TIO FOF/COL.

Acronyms and defined terms used herein are defined in the Index of Select Defined Terms, which was filed as part of the jointly-submitted UH-TIO FOF/COL.

Any specific proposed finding or conclusion not specifically referred to or addressed below is deemed denied and disputed.

B. Responses to C. Freitas' Proposed Decision and Order

C. Freitas' proposed Decision and Order is not supported by the record. As set forth in the UH-TIO FOF/COL, substantial evidence has been adduced to show that the CDUA satisfies the eight criteria as set forth in Hawai'i Administrative Rule ("HAR") § 13-5-30(c). The record also shows that the TMT Project is consistent with the UH Hilo's and the BLNR's obligations under the public trust doctrine, *Ka Pa'akai*, and Article XI, section I and Article XII, section 7 of the Hawai'i Constitution.

Ultimately, C. Freitas is categorically opposed to the construction of TMT regardless of whether or not the TMT Project satisfies the eight criteria. No location on the mountain, and no combination of mitigation measures, will make the TMT Project acceptable to C. Freitas. That position is not supported by the law.

III. CONCLUSION

For the reasons set forth herein in the UH Hilo Pre-Hearing Statement, TIO's Pre-Hearing Statement, the UH-TIO FOF/COL, the testimony of the UH Hilo's and TIO's witnesses, the examination of the Petitioners' and Opposing Intervenor's witnesses, and in UH Hilo's and TIO's other filings, UH Hilo and TIO respectfully jointly request that the Hearing Officer adopt

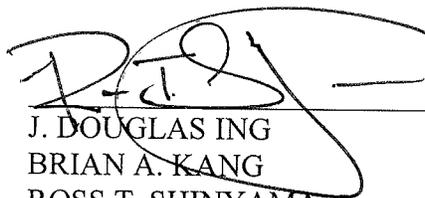
the UH-TIO FOF/COL, and reject C. Freitas' Proposed FOF/COL.

DATED: Honolulu, Hawai'i, June 13, 2017.



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Appendix A

General Responses to Petitioners'/Opposing Intervenors' Proposed Findings of Fact ("FOF") and Conclusions of Law ("COL")	
Citation does not support the proposition.	The citation offered by Petitioners/Opposing Intervenors does not support the proposed FOF or COL.
Estoppel/Improper Reconsideration	The proposed FOF or COL or a portion thereof is improper to the extent it is barred by estoppel or waiver, or improperly seeks reconsideration of the Hearing Officer's or the BLNR's prior ruling.
Inaccurate/False	The proposed FOF or COL or a portion thereof is inaccurate or false.
Incomplete.	The proposed FOF or COL is materially incomplete.
Irrelevant/Inapplicable.	The information in the proposed FOF or COL is irrelevant or inapplicable in this contested case proceeding. <u>See</u> Minute Order No. 19 [Doc. No. 281].
Lack of Jurisdiction	The proposed FOF or COL exceeds the scope of the Hearing Officer's jurisdiction and/or delegated authority
Mischaracterization.	The proposed FOF or COL mischaracterizes legal authority or the contents of the record.
Misleading. Partial quotation.	The proposed FOF or COL contains a partial quote from legal authority or a document in the record, and the incompleteness of the quotation is likely to mislead the reader.
Misleading. Presented out of context.	The proposed FOF or COL presents law or information in the record out of context and/or in a way that is likely to mislead the reader.
Misrepresentation	The proposed FOF or COL affirmatively misrepresents legal authority or the contents of the record.
Not credible.	The proposed FOF or COL is not credible based on the totality of the evidence contained in the record and/or the demonstrated biases of the witness whose testimony is cited in support of the proposed FOF or COL.

<p>Not in dispute.</p>	<p>Either (1) the proposed FOF or COL is not at issue in this proceeding, or (2) standing alone, the proposed FOF or COL is not objectionable. The designation of any individual proposed FOF or COL as “not in dispute” does not and should not be construed as an admission of said FOF or COL or a concession that said FOF or COL should be incorporated into the final FOFs and COLs. It also does not and should not be construed as assent to any inferences suggested or that may be suggested by Petitioners/Opposing Intervenors from, e.g., their misleading grouping or ordering of otherwise unrelated facts.</p>
<p>Not in evidence.</p>	<p>The proposed FOF or COL asserts “facts” and/or cites documents that are not in evidence.</p>
<p>Unsupported/Unsubstantiated</p>	<p>The proposed FOF or COL is not supported by information in the record or was not substantiated by the Petitioners/Opposing Intervenors through the contested case process.</p>

Appendix B

Summary Table of Responses to Cindy Freitas' Proposed FOF/COL

FOF/ COL #	Page	FOF/COL	Response
1	2	<p>CDUA HA-3568 First Contested Case Hearing & Remanded Supreme Court ruling as stated on December 2, 2015. See Mauna Kea Anaina Hou v. Board of Land and Natural Resources, ("BLNR"), 136 Hawaii 376, 363 P. 3d 224 (2015).</p> <p>For the foregoing reasons, this court vacates the circuit court's May 5, 2014 Decision and order Affirming Board of Land and Natural Resources, State of Hawaii's Finding of Fact, Conclusions of Law and Decision and Order Granting Conservation District Use Permit for the Thirty Meter Telescope at the Mauna Kea Science Reserve Dated April 12, 2013, and final judgment thereon. This matter is remanded to the circuit court to further remand to BLNR for proceedings consistent with this opinion, so that a contested case hearing can be conducted before the Board or a new hearing officer, or for other proceedings consistent with this opinion.</p>	See UH-TIO FOF No. 34.
2	2	<p>On February 22, 2016, circuit court judge Greg K. Nakamura remanded the matter to the Board. February 26, 2016 the Board met to restart the contested process. A public solicitation for the hearing officer occurred, a three member committee evaluated applications, and the hearing officer was announced on March 31, 2016. Three supplemental disclosures were filed by Judge Amano in April, followed by more opportunities for the Petitioners to respond. The Board more gave all parties until May 2, 2016 to raise legal argument for or against the selection process and selection of the Hearing Officer ("HO").</p>	See UH-TIO FOF Nos. 35-37. The Hearing Officer made timely disclosures throughout the contested case.

FOF/ COL #	Page	FOF/COL	Response
3	2	March 31, 2016, in Minute Order No. 1 [Doc 1], the BLNR chair issued Notice of selection of Riki May Amano as HO on subject contested case. DOC I (All DOCS refer to dated March 31 , 2016. BLNR has selected Riki Amano as the Hearing Officer. See all Docs' in "http://dnr.hawaii.gov/ink/evidentiary-hearing-submittals/" Document Library.	Incomplete. See UH-TIO FOF Nos. 36-37.
4	2	April 8, 2016, in Minute Order No.2 [Doc.3], The BLNR issued Order delegating the conduct of the contested case hearing to a HO, and confirming that the chairperson was authorized to engage the services of a HO.	Incomplete. See UH-TIO FOF Nos. 36-37.
5	2	April 8, 2016 [Doc 4] , The BLNR Notice of filing of HO supplemental disclosure.	Incomplete. See UH-TIO FOF Nos. 36-37.
6	3	April 15, 2016 [Doc 5]. Petitioners' objections to selection process and to appointment of HO made pursuant to Minute Order No. 1 dated March 31, 2016; Declaration of counsel; Exhibits 'A'-G' pursuant to HRS 92-6(a)(2)	See UH-TIO FOF/COL Appx. A at A-1; UH-TIO FOF Nos. 38-39.
7	3	April 21, 2016 [Doc 8], Applicant's response to Petitioners' objections to selection process and to appointment of HO made pursuant to Minute Order No. 1, dated March 31,2016, filed on April 15,2016	See UH-TIO FOF/COL Appx. A at A-1; UH-TIO FOF Nos. 38-39.
8	3	April 22, 2016 [Doc 9]. Notice of filing of HO second supplemental disclosure, dated April 29, 2016; Exhibit 3	The Hearing Officer made timely disclosures throughout the contested case. See also UH-TIO FOF/COL Appx. A at A-1; UH-TIO FOF No. 38.
9	3	April 27, 2016 [Doc 10] Notice of filing of HO third supplemental disclosure, dated April 25, 2016; Exhibit 4	The Hearing Officer made timely disclosures throughout the contested case. See also UH-TIO FOF/COL Appx. A at A-1; UH-TIO FOF No. 38.
10	3	April 29, 2016 Minute Order 3[Doc11] Order setting deadlines for responses to HO supplemental disclosures	The Hearing Officer made timely disclosures throughout the contested case. See also UH-TIO FOF/COL Appx. A at A-1; UH-TIO FOF No. 38.

FOF/ COL #	Page	FOF/COL	Response
11	3	May 2, 2016 [Doc 13] Petitioners' responsive and supplemental objections to selection process and to appointment of HO made pursuant to Minute Order No. 1 date March 31, 2016	See UH-TIO FOF/COL Appx. A at A-1; UH-TIO FOF No. 38-39.
12	3	May 6, 2016 in Minute Order 4 [Doc 14]. Order regarding objections to the selection process, and regarding objections to the HO.	See UH-TIO FOF/COL Appx. A at A-1; UH-TIO FOF No. 38-39.
13	3	May 6, 2016 [Doc 15], Petitioners' objections regarding procurement committee and process and committee member/BLNR Board member; Declaration of Counsel; Exhibits "A"-"E".	See UH-TIO FOF/COL Appx. A at A-1; UH-TIO FOF No. 38-39.
14	3	May 13, 2016 [Doc 31] Petitioners' motion for reconsideration of Minute Order No. 4, filed on May 6, 2016 and/or motion to strike selection process and to disqualify various member and hearing officer; Memorandum in support of motion; declaration of Richard Naiwieha Wurdeman; Exhibits "a"-"D", pursuant to HRS 13-1-32.2; Chapter 92	See UH-TIO FOF/COL Appx. A at A-1; UH-TIO FOF No. 38-39.
15	3	May 23, 2016 in Minute Order 6 [Doc 41] Order setting response date.	See UH-TIO FOF/COL Appx. A at A-1; UH-TIO FOF No. 38-39.
16	3	May 25, 2016 [doc 43] The UH statement of position on Petitioners' motion for reconsideration of minute order no. 4 filed on May 6. 20 16 and/or motion to strike selection process and to disqualify various member and HO, filed May 13, 2016; Declaration of Counsel: Exhibits "1" and "2". Pursuant to HRS 13-1-39 and HRS 103D-304(b).	See UH-TIO FOF/COL Appx. A at A-1; UH-TIO FOF No. 38-39.
17	3	May 25, 2016 [Doc 42] Response to Petitioners' objection to Christopher Yuen.	See UH-TIO FOF/COL Appx. A at A-1; UH-TIO FOF No. 38-39.
18	3	May 26, 2016 [Doc 45] Amano fifth supplemental disclosure.	The Hearing Officer made timely disclosures throughout the contested case. See also UH-TIO FOF/COL Appx. A at A-1; UH-TIO FOF No. 38-39.
19	4	May 26, 2016 [Doc 46] TMT International Observatory, LLC' s supplemental memorandum in support of its motion to have TMT International Observatory. LLC admitted as a party in the cch, Filed April 8, 2016	See UH-TIO FOF/COL Appx. A at A-1; UH-TIO FOF No. 38-39.

FOF/ COL #	Page	FOF/COL	Response
20	4	June 3, 2016 in Minute Order 9 [Doc 63] Order denying Petitioners' motion for reconsideration of Minute Order No. 4 filed on May 6, 2016 and/or Motion to strike selection process and to disqualify various members and HO.	See UH-TIO FOF/COL Appx. A at A-1; UH-TIO FOF No. 38-39.
21	4	August 26, 2016 in Minute order 17 [Doc 245] Order denying motion objecting to HO and the HO Selection Process	See UH-TIO FOF/COL Appx. A at A-3; Appx. B at B-1; UH-TIO FOF No. 38-39.
22	4	October 16, 2016 [Doc 375] Amano seventh supplemental disclosure.	The Hearing Officer made timely disclosures throughout the contested case. See also UH-TIO FOF/COL Appx. A at A-1; UH-TIO FOF No. 38.
23	4	Minute Order No.4 [Doc 16], filed on May 6, 2016 submitted the above captioned matter to the hearing officer to proceed with a contested case accordingly, prehearing conference is set for Monday, May 16, 2016, at Noon, in the Kalanimoku Board Room located on the first floor, Makai side. of the Kalanimoku Building at 1151 Punchbowl Street, Honolulu, Hawaii	Incomplete. See UH-TIO FOF No. 40.
24	4	May 9, 2016 [Doc 17] Correspondence from HO to counsel regarding pre-hearing conference.	Not in dispute.
25	4	May 26,2016 Minute Order 7 [Doc 44] Order regarding 1st pre-hearing conference and Amano fourth supplemental disclosure.	See UH-TIO FOF No. 41.
26	4	May 27, 2016 Minute Order 8 [Doc 49] Order setting hearing on motions to intervene and 2nd pre-hearing conference	Not in dispute.
27	4	August 9, 2016 in Minute Order [Doc 185] Order regarding change of location for august 12, 2016 continued hearing and 3rd pre-hearing conference	See UH-TIO FOF No. 58
28	4	August 22, 20 16 in Minute Order [Doc 238] Order regarding third pre-hearing conference.	Incomplete. See UH-TIO FOF Nos. 57, 68, 76
29	4	October 10, 2016 in Minute order No. 21 [Doc 344] Order regarding fourth prehearing conference.	Incomplete. See UH-TIO FOF Nos. 61, 63, 64, 70.

FOF/ COL #	Page	FOF/COL	Response
30	4	September 26, 2016 in Minute order 20 [Doc 289] Order setting fifth pre-hearing conference.	Not in dispute.
31	5	Minute Order No. 13, DOC 115 Dated July 21, 2016. Admission as a party in a contested case proceeding and standing. are set forth in Hawaii Administrative Rule ("HAR") Section 13-1-31 (b) and (c), HAR 13-1-31 (b) provides the requirements for "mandatory admission". The following individuals are GRANTED because each individual's participation will substantially Assist the Hearing Officer in her decision making: Mehana Kihoi, C.M. Kaho'okahi Kanuha, Harry Fergerstrom. Joseph Kualii Lindsey Camara, Jennifer Leina'ala Sleightholm, Maelani Lee, *Cindy Freitas, *William Freitas, Richard Maele Deleon, Temple of Lono by Lanny **Sinkin, Kalikolehua Kanaele, Stephanie-Malia:Tabbada, Tiffnie Kakalia, Glen Kila, Dwight J. Vicente and Brannon Kamahana Kealoha. *Cindy Freitas and William K. Freitas submitted their respective requests after the deadline. Upon inquiry, explanations were proffered by the requestors and the Hearing Officer found good cause existed for the late filings. ** Lanny Sinkin's representation of the Temple of Lono is allowed as an officer of the organization and subject to submission of the Declaration confirming the same.	Incomplete. See UH-TIO FOF Nos. 45, 47, 49, 54, 75, 412. Mr. Sinkin is not a licensed attorney in the State of Hawaii. See Statement of Representation, filed June 21, 2016 [Doc. 74].
32	5	Applicant University of Hawaii' i at Hilo ("UH") Timothy Lui-Kwan. Esq.; John Manaut, Esq.; and Ian Sandison, Esq. Attorneys for the UH.	Incomplete. See UH-TIO FOF No. 1
33	5	Petitioner Mauna Kea Anaina Hou Kealoha Pisciotta and Paul Neves	Incomplete. See UH-TIO FOF No. 2
34	5	Petitioner Deborah J. Ward	Incomplete. See UH-TIO FOF No. 6
35	5	Petitioner Flores-Case 'Ohana	Incomplete. See UH-TIO FOF No. 5
36	5	Petitioner Clarence Kukauakai Ching	Incomplete. See UH-TIO FOF No. 4
37	5	Petitioner The Hawaiian-Environmental Alliance ("KAHEA") Yuklin Aluli, Esq. and Dexter K. Kaiama Esq., Attorneys for KAHEA	Incomplete. See UH-TIO FOF No. 8

FOF/ COL #	Page	FOF/COL	Response
38	5	David Louie, Esq., Attorney for Attorney General Doug Chin Department of the Attorney General and Individual Attorneys General	Mr. Louie, et al. made a special appearance as special deputy attorney generals for Attorney General Douglas Chin and Deputy Attorneys General in their capacity as Counsel for the Board of Land and Natural Resources and Hearing Officer "for the limited purpose of representing [said] Counsel" against a motion to disqualify said counsel from representing BLNR and the Hearing Officer in this contested case. See Doc. 156.
39	5	Intervenor Thirty Meter Telescope International Observatory LLC ("TMT") J. Douglas Ing, Esq. and Ross Shinyama, Esq., Attorneys for TMT	Incomplete. See UH-TIO FOF No. 10
40	5	Intervenor Perpetuating Unique Educational Opportunity ("P.U.E.O.") Lincoln Ashida, Esq. and Newton Cho, Esq., Attorneys for PUEO.	Incomplete. See UH-TIO FOF No. 11
41	5	Intervenor Lanny Sinkin for Temple of Lono with Kahuna Tamehameha Kamealoha Anumealin Nobriga.	Incomplete. See UH-TIO FOF No. 21
42	6	Intervenor Harry Fergerstrom	Incomplete. See UH-TIO FOF No. 14
43	6	Intervenor Mehana Kihoi	Incomplete. See UH-TIO FOF No. 12
44	6	Intervenor C.M. Kahookahi Kanuha	Incomplete. See UH-TIO FOF No. 13
45	6	Intervenor Joseph Camara	Incomplete. See UH-TIO FOF No. 15
46	6	Intervenor Jennifer Leina'ala Sleightholm	Incomplete. See UH-TIO FOF No. 16
47	6	Intervenor Stephanie-Malia Tabbada	Incomplete. See UH-TIO FOF No. 23
48	6	Intervenor Tiffnie Kakalia	Incomplete. See UH-TIO FOF No. 24
49	6	Intervenor Dwight Vicente	Incomplete. See UH-TIO FOF No. 26
50	6	Intervenor Brannon Kamahana Kealoha	Incomplete. See UH-TIO FOF No. 27
51	6	Intervenor Cindy Freitas	Incomplete. See UH-TIO FOF No. 19
52	6	Intervenor William Freitas	Incomplete. See UH-TIO FOF No. 20
53	6	Intervenor Kalikolehua Kanaele	Incomplete. See UH-TIO FOF No. 22

FOF/ COL #	Page	FOF/COL	Response
54	6	There are some Exhibit ("Ex") discussed in the finding of fact and conclusion of law, in the interest of completeness, a comprehensive recitation of all Ex. entered in this proceeding.	Irrelevant/Inapplicable.
55	6	Nanci Munroe Written Direct Testimony ("WDT") Ex. S-14a. Nanci Munroe stated, around or about April 2015 Nanci Munroe joined with the protectors of Mauna a Wakea at the Hale Pohaku. She <i>also</i> began to document activities on the Mauna with her phone and shared it on social media. <i>Also</i> she did daily and continued a routine to go up to the TMT access road to monitor any activities is going on up at the TMT site. (All Exhibit to this witness as follows: Ex. S-3, S-9, S-10, S-11, S-12, S-14b, S-14cS- 14d, S-14g, S- 14e. S-14f, S-15 and S- 16).	Incomplete. Not credible. See UH-TIO FOF Nos. 972, 973, 974
56	6-7	Susan Rosier WDT Ex S-17a and S-17. I was a mechanic assistant for over 33 years, up until May 2013. Ms. Rosier had been a heavy equipment truck driver hauling a lot of overweight this heavy equipment machineries and a lot of them are Goodfellow is and other companies. So she been monitoring the TMT events and noticed all this equipment going up to the mountain. And she has extensive knowledge of this equipment, how they work the leakage, and mechanical things to do with heavy equipment. (All Exhibit to this witness as follows: Ex. S-18, S-18a, S-1 8b, S-18b 1, S-18 2, S-18b 3, S-18b 4, S-18c, S-18e, S-18f, S-18g S-18h. S-8I, S-18m. S-18n, S-18o, S-18p,S-18L	Incomplete. Not credible. Irrelevant/Inapplicable. See UH-TIO FOF Nos. 813, 972, 976, 977
57	7	Cindy Freitas WDT Ex S-2a I have visit Mauna Kea for years in the past as well as other places on the island The issues about the water aquifer, and dikes, and some of them is the Manitowoc cranes, and the excavation of the area that they going to do to put the TMT down and the roads. And I've been going up there, like I said, since 1987, and then more so in 2015 and observing all the destruction and things that have been happening up there when we were up there mostly eight months.(2-21-17Tr.V.38P.73L.14-22). (All Exhibit to this witness as follows: S-4, S-5, S-6, S-7, S-8, S-1 9, S-20, S-21, S-22,	Unsupported/Unsubstantiated. Not credible. No credible evidence was presented during the CCH to show that the TMT Project will impact any of the hydrologic resources on Mauna Kea. See UH-TIO FOF ¶¶796-823. The Petitioners and Opposing Intervenors did not submit any credible evidence to rebut Tom Nance's expert opinions. Mr. Nance has

FOF/ COL #	Page	FOF/COL	Response
		<p>S-23, S-24, S-25, S-26, S-27, S-27a, S-27b S-27c, S-27d, S-27e, S-27f, S-28, S-28a, S-28b, S-28c, S-28d, S-28d 2, S-28e, S-28f, S-29, S-29a, S-29b, S-30, S-30a, S-31 , S-31a, S-31b, S-31c, S-31d, S-31e, S-31f, S-31g and S-31h).</p>	<p>substantial education and experience in the field of hydrology and water resources. Reliable, probative, substantial, and credible evidence supports Nance's scientific opinions. <u>See id.</u></p> <p>Misleading. Presented out of context. C. Freitas testified that she conducts cultural practices on Mauna Kea, including the summit area. <u>See UH-TIO 742.</u> However, C. Freitas did not establish how the TMT Project would impact her practices, or that she would be unable to continue such practices if the TMT Project were built. There is no credible evidence that the TMT Project will cause a substantial adverse impact on C. Freitas's cultural practices. <u>See id.</u> C. Freitas also did not establish that she conducts cultural practices on the Northern Plateau or the specific 5 acre area where the TMT Observatory is proposed to be built. No credible evidence was presented to establish that customary and traditional practices occur within the area E location site of the TMT Observatory. <u>See UH-TIO FOF 624 and 627.</u> There is a;sp no reliable probative and substantial evidence that his or his referenced practices are within the bundle of rights protected by article XII, section 7 of the Hawaii State</p>

FOF/ COL #	Page	FOF/COL	Response
			Constitution. Unsupported/Unsubstantiated. See UH-TIO FOF Nos. 245, 246, 498, 500, 742, 794, 814, 815, 816, 972, 988, 989
58	7	Mr. Gray Sanders have been with the TMT Corporation since 2004 and since May 2014 with Thirty Meter Telescope International Observatory ("TIO") that was formed on May 6, 2014. Mr. Sanders is responsible for managing the design and construction of the TMT and her report to its board of directors. (TIO Witness; Ex C-2)	Incomplete. See WDT Sanders at 1.
59	7	Mr. Perry J. White was the principal author of the Conservation District Use Application ("CDUA") HA-3568 for the TMT project. (UH Witness; Witness Statement 1)	Incomplete. See WDT White at 1.
60	7	Mr. Walter M. Heen. He was the first Director of the Office of Mauna Kea Management ("OMKM") at the UH and was appointed as Director of OMKM by Chancellor Rose Tseng in 2000. (UH Witness; Witness Statement 13)	Incomplete. See WDT Heen at 1.
61	7	Ms. Kehaunani Abad, PHD. Her professional areas are in anthropology, ethnography, archaeology, historic preservation, and Hawaiian Culture. (KAHEA Witness; Ex B.08a)	Not credible. Incomplete. Dr. Abad's testimony was not credible, especially for a purported expert. See UH-TIO FOF Nos. 415, 604-608
62	7	Mr. Braian Kawika Cruz. He is the author of the 2009-2010 cultural impact assessment ("CIA") for the TMT and was assigned to the TMT CIA project in 2009. (KAHEA Witness; Ex. B-57)	Not credible. Incomplete. Mr. Cruz's testimony is not credible. See UH-TIO FOF No. 203.

FOF/ COL #	Page	FOF/COL	Response
63	8	<p>Ms. Ruth Aloua is a Kanaka Maoli (Native Hawaiian) and cultural practitioner from Kailua-Kona. I received my Bachelor of Arts in Anthropology from the University of Hawai'i at Hilo in 2011. Three years later in 2014 I graduated from Simon Fraser University in British Columbia, Canada with a Master of Arts in Archaeology. My knowledge and skills range from familiarity with archaeological and anthropological practices, policies, management plans, at the county, state, and federal level, agriculture and aquaculture food production, to place-based knowledge grounded in the people, place, and culture of the Kona District (Flores-Case 'Ohana Witness; Ex B.24a)</p>	<p>Not credible. Incomplete. Ms. Aloua's testimony was not credible. See UH-TIO FOF Nos. 601, 602.</p>
64	8	<p>Minute Order No. 13, DOC 115 Dated July 21, 2016 Confirming the following individuals withdrew their requests and will instead be called as Hearing Officer WITNESSES as the contested case hearing as followed:</p>	<p>Incomplete. Misleading. Presented out of context. See UH-TIO FOF Nos. 25-35, 45 - 48.</p>
65	8	<p>Wilma H. Holi P.O. Box 368 Hanapepe, HI 96716</p>	<p>Incomplete. Misleading. Presented out of context. Ms. Holi testified in the contested case. See UH-TIO FOF 105.</p>
66	8	<p>Ivy McIntosh 67-1236 Panale'a St Kamuela HI 96743 3popoki@gmail.com</p>	<p>Incomplete. Misleading. Presented out of context. Ms. McIntosh waived any right to testify at the contested case hearing or to claim she has been deprived of an opportunity to provide her position and information as part of these proceedings. See UH-TIO COL ¶¶25-35.</p>
67	8	<p>Moses Kaelamakia Jr. 1059 Puku St. Hilo, HI 96720 mkealama@yahoo.com</p>	<p>Incomplete. Misleading. Presented out of context. Mr. Kaelamakia waived any right to testify at the contested case hearing or to claim he has been deprived of an opportunity to provide his position and information as part of these proceedings. See UH-TIO COL ¶¶25-35.</p>

FOF/ COL #	Page	FOF/COL	Response
68	8	Crystal F. West P.O. Box 193 Kapaau, HI 96755 crystalinx@yahoo.com	Incomplete. Misleading. Presented out of context. Ms. West waived any right to testify at the contested case hearing or to claim she has been deprived of an opportunity to provide her position and information as part of these proceedings. See UH-TIO COL ¶¶25-35.
69	8	Patricia Ikeda pehekeanila@gmail.com	Incomplete. Misleading. Presented out of context. Ms. Ikeda withdrew as a Hearing Officer Witness on August 29, 2016 and reconfirmed her withdrawal on October 17, 2016. See UH-TIO FOF ¶48.
70	8	August 22, 2016, in Minute Order No. 16 [Doc 238], on page 3 and 4 states as follows: There will be a site visit to Mauna Kea on Monday, September 26, 2016. For health and safety reasons, only approved participants will be allowed <i>oii</i> the site visit. Approved participants will meet at Hale Pohaku at 10:00 a.m. to caravan together to pre-designated Sites. Please review the attached "Mauna kea Hazards" and follow the precautions therein. if you intend to participate in the site Visit. Proposal regarding the locations to be visited, who will attend, and the procedures to be following during the Site Visit shall be submitted by the parties/counsels no later than five (5) business days after the filing of this Minute Order. Any responses, objection. Oppositions, ect. Shall be filed no later than ten (10) business days after the filing of this Minute Order.	Not in dispute that these instructions and statements were included in Minute Order No. 16. However, the site visit was reasonable and appropriate giving the Hearing Officer a reasonable period of time and conditions for viewing the general landscape and areas proposed for the TMT Project. See UH-TIO FOF Nos. 68-73.

FOF/ COL #	Page	FOF/COL	Response
71	8-9	<p>August 17, 2016, C. Freitas filed DOC 220 Site Visit Proposal (Exhibit S-29 or 22). Minute Order 18 (DOC 274) filed on September 19, 2016 ONLY approved persons for Site Visit and did not address other request stated in DOC 220 nor did the HO respond to the request.</p>	<p>Misrepresentation. Misleading. Presented out of context. Per Minute Order No. 18 [Doc. 274], the Hearing Officer did consider C. Freitas' site visit proposal [Doc. 220] in issuing Minute Order No. 18. However, C. Freitas' requests for the site visit were clearly unreasonable. The site visit was reasonable and appropriate giving the Hearing Officer a reasonable period of time and conditions for viewing the general landscape and areas proposed for the TMT Project. See UH-TIO FOF Nos. 68-73</p>
72	9	<p>September 19, 2016 in Minute order No 18 [Doc 274] Order regarding site visit to Mauna Kea September 26,2016: Persons Approved for site visit to Mauna kea on September 26, 20 16 as follows: William Freitas, Tim Lui-K wan, Ian L. Sandison or John P. Manaut (two of three attorneys for the UH). three representatives from the Office of Mauna Kea Management the Institute for Astronomy or the Office of the General Counsel, J. Leina' ala Sleightholm and First responder/medical personnel Bimo Akiona, Douglas Ing and/or Ross Shinyama, attorneys for TIO, two TIO representatives, Richard Wurdeman, attorney for Mauna kea Anaina Hou Petitioners; Kealoha Pisciotto, Keomailani Van Gogh, Clarence Kukaakahi Ching, e. Kalani Flores, Pualani Case, Hawane Rios, Deborah Ward and Candance Fujikane, Harry Fergerstrom, Cindy Freitas, Lincoln Ashida, attorney for PUEO; Shadd Keahi Warfield, Richard Ha, Bill Brown and Mehana Kihei.</p>	<p>See response to proposed finding of fact 71 above. Each party was permitted to identify other individuals that would accompany them on the site visit. C. Freitas did not identify any other individuals that she wanted to attend the site visit. See Doc. 220.</p>

FOF/ COL #	Page	FOF/COL	Response
73	9	September 21, 2016, C. Freitas filed DOC 278 Motion to Amend DOC 274 Site Visit to Include Request in DOC 220 (Exhibit S-24) Minute Order 45, HO responded eight months later violation of Due Process	<p><u>See response to proposed finding of fact 71 above.</u> C. Freitas' motion to amend the site visit [Doc. 278] requested the same unreasonable requests that she requested in her initial site visit proposal [Doc. 220] and that had already been rejected by the Hearing Officer in Minute Order No. 18. Moreover, as her next proposed finding of fact demonstrates, the Hearing Officer, through Michael Cain of OCCCL, did orally address her motion to amend.</p> <p>Minute Order No. 45 [Doc. 45] did not address C. Freitas' motion to amend. Nevertheless, there is no denial of due process because the Hearing Officer considered and correctly rejected C. Freitas' unreasonable requests regarding the site visit. To the extent that C. Freitas' motion to amend has not been formally ruled upon in writing, it should be denied. <u>See UH-TIO COL 36.</u></p>
74	9	September 26, 2016, C. Freitas Filed DOC 285 Objection to Phone call by Michael Cain on 9/23/16 that was instructed by Hearing Officer. HO did not respond to this Motion.	<p><u>See response to proposed finding of fact 73 above.</u></p>

FOF/ COL #	Page	FOF/COL	Response
75	9	<p>September 26, 2016 at 10:00 the parties meet at Hale Pohaku board on three Arnot's vans then ascend up to Mauna Kea. Designated Sites were at 1) Proposed Thirty Meter Telescope Site where a red helium balloon on a rope that was approximately 187 feet (it did <i>not</i> have any indication if it was 187 feet to illustrate how high is the TMT building, it seems a lot less and you could not see the whole scope of the balloon, we were not allow to stop or get out of the van) 2) The summit loop road near the Keck Observatory no stopping and 3) batch plant were we stop to use the restroom and 4) 3. or 3.5 mile marker where the ahu was once located.</p>	<p>Inaccurate/False. Misleading. Presented out of context. The site visit was reasonable and appropriate giving the Hearing Officer a reasonable period of time and conditions for viewing the general landscape and areas proposed for the TMT Project. See UH-TIO FOF Nos. 68-73. C. Freitas has no absolutely no evidence that the red helium balloon was not placed 187 feet high. Her unsupported and baseless speculation is not fact.</p>
76	9	<p>September 27, 2016, C. Freitas filed DOC 290 Objection to September 26, 2016 Site Visit On Mauna Kea (Exhibit S-25). HO did not respond to this motion.</p>	<p>See response to proposed finding of fact 75 above. Doc. 290 was not a motion and C. Freitas' characterization of Doc. 290 as a motion is a mischaracterization; rather Doc. 290 was an after the fact objection to the site visit. The site visit was reasonable and appropriate.</p>
77	9	<p>There are some Minute Orders discussed in the finding of fact and conclusion of law, in the interest of completeness a comprehensive recitation of all Minute Order in this proceeding as follows, otherwise all Minute Orders were issued by the HO</p>	<p>Description of Minute Orders in FOF/COL Nos. 78 – 125 are defective for the following reasons:</p>
78	9	<p>On March 31, 2016, in Minute Order No. 1 [Doc. 1], the BLNR Chair issued Notice of selection of Riki May Amano as Hearing Officer on subject contested case</p>	<p>Incomplete. See UH-TIO FOF Nos. 37-39.</p>
79	10	<p>On April 8, 2016, in Minute Order No.2 [Doc. 3], the BLNR issued Order delegating the conduct of the contested case hearing to a hearing officer, and confirming that the chairperson was authorized to engage the services of a hearing officer</p>	<p>Incomplete. See UH-TIO FOF Nos. 37-39.</p>

FOF/ COL #	Page	FOF/COL	Response
80	10	On April 29, 2016, in Minute Order No. 3 [Doc. 11], the BLNR Chair issued Order setting deadlines for responses to Hearing Officer's supplemental disclosures	Incomplete. See UH-TIO FOF Nos. 37-39.
81	10	On May 6, 2016, in Minute Order No. 4 [Doc. 14], the BLNR issued Order regarding objections to the selection process, and regarding objections to the Hearing Office	Incomplete. See UH-TIO FOF Nos. 37-39.
82	10	On May 9, 2016 in Minute Order No. 5 [Doc. 16], the Hearing Officer issued Order setting pre-hearing conference	Incomplete. See UH-TIO FOF No. 40.
83	10	On May 23, 2016 in Minute Order No. 6 [Doc. 41], the Hearing Officer issued Order setting response date	Not in dispute.
84	10	On May 26, 2016 in Minute Order No. 7 [Doc. 44], the Hearing Officer issued Order setting hearings on motions to intervene and 2nd pre-hearing conference	Incomplete. See UH-TIO FOF No. 41.
85	10	On May 27, 2016, in Minute Order No. 8 [Doc. 49], the Hearing Officer issued Order setting hearings on motions to intervene and 2nd pre-hearing conference	Not in dispute.
86	10	On June 3, 2016, in Minute Order No. 9 [Doc. 63], the BLNR issued Order denying Petitioners' motion for reconsideration of Minute Order No. 4 filed on May 6, 2016 and/or Motion to strike selection process and to disqualify various members and Hearing Officer	Incomplete. See UH-TIO FOF Nos. 29-39
87	10	On June 6, 2016 in Minute Order No. 10 [Doc. 65], the Hearing Officer issued Order regarding hearing /conference room rules and extended coverage	Not in dispute.
88	10	On June 9, 2016 in Minute Order No. 11 [Doc. 66], the Hearing Officer Order issued regarding relocation of hearings on motions to intervene	Not in dispute.
89	10	On July 12, 2016 in Minute Order No. 12 [Doc. 82], the BLNR Chair issued Order denying Temple of Lono's motion for refund of filing fee, filed June 23, 2016	Not in dispute.
90	10	On July 21, 2016 in Minute Order No. 13 [Doc. 115], the Hearing Officer issued Order on the hearing on admission or intervention as a party	Incomplete. See UH-TIO FOF Nos. 40-53.

FOF/ COL #	Page	FOF/COL	Response
91	10	On July 22, 2016 in Minute Order No. 14 [Doc. 124], the BLNR issued Order denying Dwight J. Vicente's motion to disqualify Judge Riki May Amana (ret.); State of Hawaii lack of jurisdiction to hear the contested case hearing	Incomplete. See UH-TIO FOF Nos. 29-39; Appx. A at A-1.
92	11	On August 9, 2016 in Minute Order No. 15 [Doc. 185], the Hearing Officer issued Order regarding change of location for August 12, 2016 continued hearing and 3 rd pre-hearing conference.	Not in dispute.
93	11	On August 22, 2016 in Minute Order No. 16 [Doc. 238], the Hearing Officer issued Order regarding third pre-hearing conference.	Not in dispute.
94	11	On August 26, 2016 in Minute Order No. 17 [Doc. 245], the BLNR issued unsigned Order denying motion objecting to the Hearing Officer and the Hearing Officer Selection Process.	Incomplete. See UH-TIO FOF/COL Appx. B at B-1; UH-TIO FOF Nos. 29-39.
95	11	On September 19, 2016 in Minute Order No. 18 [Doc. 274], the Hearing Officer issued Order regarding site visit to Mauna Kea - September 26.	Incomplete. See UH-TIO FOF No. 71.
96	11	On September 23, 2016 in Minute Order No. 19 [Doc. 281], the Hearing Officer issued Order granting Perpetuating Unique Educational Opportunities. Inc. s motion to set the issues Doc. 99; Order setting issues.	Incomplete. See Minute Order No. 19.
97	11	On September 26, 2016 in Minute Order No. 20 [Doc. 289], the Hearing Officer issued Order setting fifth pre-hearing conference.	Not in dispute.
98	11	On October 10, 2016 in Minute Order No. 21 [Doc. 344], the Hearing Officer issued Order regarding fourth pre-hearing conference.	Incomplete. See UH-TIO FOF No. 50.
99	11	On October 10, 2016 in Minute Order No. 22 [Doc. 345], the Hearing Officer issued Order denying Harry Fergstrom's (1) Motion to reconsider all motions, application, and/or request for admission or intervention as a party or other parties in this matter; and (2) Motion to strike all motions, applications, decision, etc.; Essentially making moot the entire hearing (Doc. 96).	Incomplete. Misleading. Presented out of context. See UH-TIO FOF/COL Appx. A at A-3.
100	11	On October 10, 2016 in Minute Order No. 23 [Doc. 346], the Hearing Officer issued Order denying Temple of Lono's motion for partial summary judgment (Doc 78).	Incomplete. See UH-TIO FOF/COL Appx. A at A-1

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101	On October 10, 2016 in Minute Order No. 24 [Doc. 347], the Hearing Officer issued Order denying Kalikolehua Kanae's <i>motion to exclude/remove PUEO, TMT, UH Manoa/Hilo, and all petitioners seeking for permit for TMT by circumvention of religious protection of the Hawaii Constitution Article XI and HRS 7-11-1107 committing desecration.</i>	11	Incomplete. See UH-TIO FOF/COL Appx. B at B-1
102	On October 10, 2016 in Minute Order No. 25 [Doc. 348], the Hearing Officer issued Order denying Stephanie-Malia:Tabbada's motion to vacate entire process for violation of BLNR and University of Hawaii fiduciary trust, rights, responsibilities, breach of contract, etc. mandated the by the law of the land (Doc 97).	11	Incomplete. See UH-TIO FOF/COL Appx. A at A-4.
103	On October 10, 2016 in Minute Order No. 26 [Doc. 349], the Hearing Officer issued Order denying Maelani Lee's motion to intervene (Doc 84).	11	Incomplete. See UH-TIO FOF/COL Appx. A at A-2.
104	On October 10, 2016 in Minute Order No. 27 [Doc. 350], the Hearing Officer issued, Order denying Petitioners' request for continuance on submissions and next hearing date (Doc 81) and Petitioners' supplemental request for continuance on submissions and next hearing date (Doc 82).	12	Incomplete. See UH-TIO FOF/COL Appx. A at A-2.
105	On October 10, 2016 in Minute Order No. 28 [Doc. 351], the Hearing Officer issued Order denying Mehana Kihoi's motion to deny the intervention of Perpetuating Unique Educational Opportunities as a party in the contested case hearing (Doc. 98).	12	Incomplete. See UH-TIO FOF/COL Appx. A at A-4.
106	On October 10, 2016 in Minute Order No. 29 [Doc. 352], the Hearing Officer issued Order denying Temple of Lono's motion to dismiss for lack of jurisdiction based on unresolved land claims (Doc 126).	12	Incomplete. See UH-TIO FOF/COL Appx. B at B-1.
107	On October 10, 2016 in Minute Order No. 30 [Doc. 353], the Hearing Officer issued Order denying Kamahana Kealoha: Motion invoking Quo Warranto, respectfully, a demand of jurisdiction; Declaratory judgment on a constitutional issue / violation resubmitted 8/8/2016 (Doc 180).	12	Incomplete. See UH-TIO FOF/COL Appx. B at B-2.

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108	12	On October 10, 2016 in Minute Order No. 31 [Doc. 354], the Hearing Officer issued Order denying motion for protective order for the Honorable David Y. Ige, Suzanne Case and Stanley Reohrig (Doc 182).	Incomplete. See UH-TIO FOF/COL Appx. B at B-3.
109	12	On October 10, 2016 in Minute Order No. 32 [Doc. 355], the Hearing Officer issued Order denying motion to strike motion for protective order for the Honorable David Y. Ige, Suzanne Case and Stanley Reohrig. filed on August 8, 2016 (Doc. 187).	Incomplete. See UH-TIO FOF/COL Appx. B at B-3.
110	12	On October 10, 2016 in Minute Order No. 33 [Doc. 356], the Hearing Officer issued Order denying Temple of Lono's motion to dismiss out of time (Doc. 179).	Incomplete. See UH-TIO FOF/COL Appx. B at B-2.
111	12	On October 11, 2016 in Minute Order No. 34 [Doc. 363], the Hearing Officer issued Order denying Kamahana Kealoha's motion demanding inventory of the so-called ceded lands containing the specific land and parcel the TIO plans to be sub-leased by UH who leases said lands from the BLNR, a survey of these lands also (Doc. 191).	Incomplete. See UH-TIO FOF/COL Appx. B at B-4.
112	12	On October 13, 2016 in Minute Order No. 35 [Doc.365], the Hearing Officer issued Order re: dismissal of Shelley Stephen's request to be part of Contested Case Hearing (Doc. 213).	Incomplete. See UH-TIO FOF No. 50.
113	12	On October 14, 2016 in Minute Order No. 36 [Doc. 376], the BLNR issued Order voiding permit.	Incomplete. See UH-TIO FOF No. 74.
114	12	On October 19, 2016 in Minute Order No. 37 [Doc. 388], the Hearing Officer issued Order denying motion to strike Conservation District Use Application, HA-3568, dated September 2, 2010, and/or motion for summary judgment (Doc. 94)	Incomplete. See UH-TIO FOF/COL Appx. A at A-3.
115	13	On October 19, 2016 in Minute Order No. 38 [Doc. 389], the Hearing Officer issued Order denying motion to disqualify BLNR's and Hearing Officer's counsel (Doc 95).	Incomplete. See UH-TIO FOF/COL Appx. A at A-3.
116	13	On October 28, 2016 in Minute Order No. 39 [Doc. 406], the Hearing Officer issued Order denying renewed motions to disqualify Hearing Officer (Doc 340).	Incomplete. See UH-TIO FOF/COL Appx. B at B-8.

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117	13	On October 28 2016 in Minute Order No. 40 [Doc. 407], the Hearing Officer issued Order denying J Leinaala Sleightholm's motion to clarify minute.	Incomplete. See UH-TIO FOF/COL Appx. B at B-9.
118	13	On January 20, 2017 in Minute Order No. 41 [Doc. 446], the Hearing Officer issued Order regarding date to set witnesses.	Incomplete. See UH-TIO FOF No. 25.
119	13	On February 17, 2017 in Minute Order No. 42 [Doc. 464], the Hearing Officer issued Order granting Flores-Case Ohana's request for subpoena for Samuel Lemmo - Administrator, Office of Conservation and Coastal Lands, DLNR, State of Hawaii (Doc. No. 452) and denying the University of Hawaii at Hilo's motion to quash Flores-Case Ohana's request for Samuel Lemmo - Administrator, Office of Conservation and Coastal Lands, DLNR State of Hawaii (Doc 444).	Incomplete. See UH-TIO FOF/COL Appx. C at C-2; UH-TIO FOF No. 101.
120	13	On April 18, 2017 in Minute Order No. 43 [Doc.552], the Hearing Officer issued Order setting post-hearing deadlines.	Incomplete. See UH-TIO FOF No. 109.
121	13	On April 20, 2017 in Minute Order No. 44 [Doc. 553], the Hearing Officer issued Order regarding documentary evidence.	Incomplete. See UH-TIO FOF/COL Appx. D at D-1 – D-5; UH-TIO FOF Nos. 111, 514 n.1; 580 n.3; UH-TIO COL Nos. 29, 30.
122	13	On May 2, 2017 in Minute Order No. 45 [Doc. 590], the Hearing Officer issued Order granting in part / denying in part petitioners Mauna Kea Anaina Hou, et al.'s request for further status conference and/or consideration of proposed scheduling (Doc. 254).	Incomplete. See UH-TIO FOF/COL Appx. B at B-4.
123	13	On May 2, 2017 in Minute Order No. 46 [Doc. 595], the Hearing Officer issued Order related to Temple of Lono motion to recuse Hearing Officer (Doc. Nos. 262, 434, 436, 536, 544).	Incomplete. See UH-TIO FOF/COL Appx. B at B-5.
124	13	On May 4, 2017 in Minute Order No. 47 [Doc. 609], the Hearing Officer issued Order related to Temple of Lono motion for summary judgment (disqualification) (Doc. 263).	Incomplete. See UH-TIO FOF/COL Appx. B at B-5.

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125	13	On May 12, 2017 in Minute Order No. 48 [Doc. 631], the BLNR issued Order denying the Temple of Lono's emergency motion to Board to stay proceedings, filed April 27, 2017 [Doc. 573] and related documents [Docs 582, 583, 584, 585 600, 602, 624.	Incomplete. See UH-TIO FOF/COL Appx. D at D-6.
126	14	On July 18, 2016 C Freitas filed DOC 89 Request for Continuance for time and next Hearing Date. HO did not respond to this request.	Incomplete. See UH-TIO FOF/COL Appx. A at A-2. Statement "HO did not respond to this request" is incorrect; request denied by oral ruling 08/05/16 at 20:7, 25:13.
127	14	July 20, 2016 C. Freitas filed DOC 114 Reply to TMT International Observatory LLC's and UH responses to Petitioners' request for a continuance letter sign on July 15, 2016. (HO did not respond to this request.)	Incomplete. See UH-TIO FOF/COL Appx. A at A-2. Statement "HO did not respond to this request" is incorrect; request denied by oral ruling 08/05/16 at 25:13, Minute Order No. 27 (Doc. 350).
128	14	On August 22, 2016, C Freitas filed DOC 227 Motion to file Motion out of Time. (Have been considered in relation to the motion Minute order 33 DOC 356)	Incomplete. See UH-TIO FOF/COL Appx. B at B-4;
129	14	On September 1, 2016, C Freitas filed DOC 250 Motion to withdrawal Ku'uipo Freitas as witness; Memorandum in Support HO did not respond to this Motion.	Not in dispute. Statement "HO did not respond to this Motion" is irrelevant/inapplicable and moot given that Ku'uipo Freitas, as requested, did not testify at the CCH.

FOF/ COL #	Page	FOF/COL	Response
130	14	On September 12, 2016, C Freitas filed DOC 259 Memorandum In Support of Petitioners Mauna Kea Anaina Hou, Et Al.'s Request for Further Status Conference and or Consideration of Proposed Scheduling Minute Order No. 45 (DOC 590) is moot was answer 7 months later	Incomplete. See UH-TIO FOF/COL Appx. B at B-4. Statement "Minute Order No. 45 (DOC 590) is moot was answer 7 months later" is Inaccurate/False. The Hearing Officer promptly and reasonably addressed the numerous dilatory tactics of the Petitioners/Opposing Intervenor, including Mr. Wurdeman's request for a further status conference, et al. [Doc. 254]. See UH-TIO FOF ¶¶75-87.
131	14	On September 26, 2016, C Freitas filed DOC 284 Motion to Amend DOC 281Minute Order No. 19. (DOC 284) HO did not respond to this motion	Incomplete. See UH-TIO FOF/COL Appx. B at B-6. Statement "HO did not respond to this Motion" is irrelevant/inapplicable. In Doc. 284, C. Freitas asked the Hearing Officer to amend Minute Order No. 19 to reflect her appearance at the 8/29/16 hearing. The transcript from the 8/29/16 reflects the presence of C. Freitas. There is no prejudice as a result.
132	14	On October 3, 2016, C Freitas filed again DOC 297 Respond to Proposed DOC 256 all issues should also be considered (Exhibit S-21). (See email on 9/19 and mailed hard copy with William Freitas Respond also DOC 297 Hearing Officer did not respond)	Incomplete. See UH-TIO FOF/COL Appx. A at A-5. Statement "See email on 9/19 and mailed hard copy with William Freitas Respond also DOC 297 Hearing Officer did not respond" is incorrect; issue was resolved by Minute Order No. 19 (Doc. 281).

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133	14	On October 4, 2016, C Freitas filed DOC 305 Motion for Extension of Time for Filing of Motions, witness and Exhibit Lists and Direct Testimonies and PreHearing Statement. (HO did not respond to this Motion)	Incomplete. See UH-TIO FOF/COL Appx. B at B-7. Statement "HO did not respond to this Motion" is inaccurate/false. See Minute Order No. 56 [Doc. 660]. C. Freitas participated fully in the contested case including the filing of motions, the submission of exhibits, and the examination and presentation of witnesses.
134	14	On October 7, 2016, C Freitas filed DOC 333 Objection to all Minute Order No. _ That was filed in the Document Library on October 5, 2016 DOC 322, 321 ,320, 319, 318, 317, 316, 315, 314, 313, 312,311 , 309 and 308.(Minute Order No. 22 states premature filing of a motion for reconsideration it unclear though it was filed on time)	Incomplete. See UH-TIO FOF/COL Appx. B at B-7. Statement "Minute Order No. 22 states premature filing of a motion for reconsideration it unclear though it was filed on time" is irrelevant/inapplicable. Her objection is also baseless.
135	14	October 14, 2016, C. Freitas filed DOC 372 In support of UHH statement to re schedule. (HO did not respond to this Support)	Incomplete. See UH-TIO FOF/COL Appx. B at B-8. Statement "HO did not respond to this Support" is irrelevant/inapplicable.
136	14	On October 18, 2016, C Freitas filed DOC 391 Motion to Dismiss Contested Case Hearing RE Conservation Use Application HA-3568. (HO did not respond to this Motion)	Incomplete. See UH-TIO FOF/COL Appx. B at B-9. Statement "HO did not respond to this Motion" is inaccurate/false. See Minute Order No. 62 [Doc. 685].
137	15	February 26, 2017, C. Freitas filed DOC 481 Motion to admit exhibits and written testimony into Evidence; Memorandum in support of motion. (HO respond in Minute Order 44 need to clarification)	Incomplete. See UH-TIO FOF/COL Appx. D at D-1 – D-2. Statement "HO respond in Minute Order 44 need to clarification" is irrelevant/inapplicable.
138	15	March 3, 2017 Cindy Freitas filed DOC 492 First supplemental Motion to Admit Exhibits and Written Direct Testimony Into Evidence; Memorandum in Support of Motion. (HO respond in Minute Order 44 need to clarification)	Incomplete. See UH-TIO FOF/COL Appx. D at D-1 – D-2. Statement "HO respond in Minute Order 44 need to clarification" is irrelevant/inapplicable.

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139	15	March 16, 2017 C. Freitas filed DOC 512 motion in opposition to the admission of exhibits A-141 , A-142, A-143, A-45, A-45a, A-41 and witness testimony Sara Collins, PH.D, David Lassner, Jesse Alan Eiben, Ph.D .. Dennis Charles Gosser and Pat Kaawaiolaa. (HO respond in Minute Order 44)	Incomplete. See UH-TIO FOF/COL Appx. D at D-1 – D-2.
140	15	March 22, 2017 C. Freitas filed DOC 529 joinder to Temple of Lono motion to Board of Land and Natural Resources to dismiss HA-3568 Minute Order 43. the HO issued Order setting post-hearing deadlines.	Incomplete. See UH-TIO FOF/COL Appx. D at D-4.
141	15	March 22, 2017 C. Freitas filed DOC 530 joinder to Mauna Kea Anaina Hou motion requesting time to respond to exhibit objections. April 20, 2017, in Minute Order No. 44 [Doc 553], the HO issued Order regarding documentary evidence.	Incomplete. See UH-TIO FOF/COL Appx. D at D-4.
142	15	March 25, 2017 C. Freitas filed DOC 548 William Freitas and Clarence Kukkauakahi Ching's motion for joinder to Temple of Lono's motion for protective order. (HO did not respond to this Motion)	Incomplete. See UH-TIO FOF/COL Appx. D at D-4. Statement "HO did not respond to this Motion" is irrelevant/inapplicable.
143	15	April 25, 2017 C. Freitas filed DOC 557 memorandum in support of motion for reconsideration of Minute Order 43. May 23, 2017 in Minute Order No. 50, HO Denied Doc 557. is still unclear on the due process issue.	Incomplete. See UH-TIO FOF/COL Appx. D at D-5. Statement "HO Denied Doc 557. is still unclear on the due process issue" is inaccurate/false. See Minute Order No. 50 [Doc. 646].
144	15	April 26, 2017 DOC 562 filed Errata re: Cindy Freitas memorandum of support of motion for reconsideration of Minute Order 43. This is reflecting on Finding of Fact No. <u> </u> hereinabove.	See response to proposed finding of fact 143 above.
145	15	April 26, 2017 C. Freitas filed DOC 571 Cindy Freitas motion to reconsideration to Minute Order 44; Memorandum in support (HO did not respond to this Motion)	Incomplete. See UH-TIO FOF/COL Appx. D at D-6. Statement "HO did not respond to this Motion" is inaccurate/false. See Minute Order No. 51 [Doc. 647].

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146	15	The contested case hearing commenced on October 20, 2016. Testimony was taken evidence was submitted during the forty four days: October, 20, 24, 25, 26, 27, 31, 2016; November 2, 3, 5, 16.2016; December 1, 2, 5, 6, 8, 12, 13, 16, 19, 20, 2016; January 3, 4, 5, 9, 10, 11 12, 19, 25, 26, 24, 30. 31.2017; February 13, 14, 15, 16, 21, 22, 23, 27, 28, 2017; March 1 and 2, 2017. Most of the Parties attended everyday.	Incomplete. See UH-TIO FOF Nos. 88-106.
147	16	Pursuant to Minute Order No. 21 [Doc 344] issued on October 10, 2016, At the contested case hearing, all witnesses shall have ten minutes to summarize their testimony before cross examination will commence. Re-direct examination will be permitted. Re-cross examination will be considered. Tr. 1 10/20/16:VI :P.18:L12-15	Incomplete. See UH-TIO FOF Nos. 88-106.
148	16	On October 20, 2016 at Contested Case Hearing ("CCH") there were certain procedural issues most of the parties objected to designate a witness as an "expert" because the burden of proof is based upon the preponderance of evidence, and either everyone is an expert or no can be an expert in order to weight this properly. Tr. 10/20/16:V 1.P:46L 12-19	Inaccurate/False. Not credible. See UH-TIO COL Nos. 56-63.
149	16	The HO ruled this is a contested case hearing administrative, that HAR does not apply, although I don't think it's necessarily applicable to this particular issue. and I don't see having to qualify other people who wish to be witness to this proceeding. Tr. 10/20/16:V 1 :P52:L1,2 and P53:L-13	Misleading. Partial quote. See UH-TIO COL Nos. 56-63. It is also inaccurate insofar as the Hawaii Administrative Rules do apply, but the Hawaii Rules of Evidence do not necessarily apply.
150	16	The HO ruled on the testimony has come up. When your turn comes, you can go ahead and make the objection. Tr. 10/20/16:V 1 :P170:L3-5	Incomplete. See UH-TIO COL No. 37.

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151	16	The HO ruled on exhibits which she will take it under advisement until all the cross-examination is completed. Tr. 10/20/16: VI :P230:L 15-21	Misleading. Partial quote. Complete statement was: "So all of these exhibits which we have said already many times I've numbered them, these are all beginning with A, I'm going to at this time take it under advisement until all of the cross-examination is completed and this witness' testimony is completed, and then you may renew, if you wish, and we will see what happens." 10/20/16 at 230:15-21.
152	16	The HO did not set aside any inspection of the transcripts. See DOC 633 and 562; HAR 13-197-1 9.	Misleading. Presented out of context. See UH-TIO FOF Nos. 109-112. Citation does not support the proposition. HAR Title 13, Chapter 197 concerns the Practice and Procedure before the Hawaii Historic Places Review Board.
153	16	The entire footprint of the TMT Observatory dome, support building, and parking area will be roughly five acres, including the area of disturbance during construction. A half-acre portion of this area has previously been disturbed by the existing 4-wheel drive road and site testing equipment; the original disturbance occurred during site testing in the 1960s, site testing was also performed in this area for the TMT project in the 2000s. (CDUA Ex. A-001:TMT Management Plan:P2-5)	Citation does not support the proposition. Correct citation is Ex. A-1, TMT Management Plan, Section 3 at 3-5.
154	16	Preliminary engineering plans indicate that the total volume of excavated material ("cut" material) will be 64,000 cubic yards. These preliminary engineering plans, which illustrate proposed changes in contours, are included in Attachment B. The estimated cut and fill volumes are based on geotechnical assumptions concerning the subsurface in the area and could change following the completion of geotechnical borings. (CDUA Ex. A-001:TMT Management Plan:PB-3)	Not in dispute.

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155	17	Heating, ventilation, and air-conditioning (HVAC) equipment at the proposed facility will produce mechanical noise that is not now present. The TMT Observatory HVAC equipment (which would be used to cool the dome during the daytime so that heat from it does not degrade viewing conditions during the nighttime observing hours, among other needs) will be similar in function to the systems currently in use by existing observatories and will be no louder than the existing equipment. (CDUA Ex A-001:p2-33)	Misleading. Presented out of context. Preceding paragraph states, “[s]ounds from existing observatory HVAC exhaust systems were not noticeable during the summit location field measurement. When the sound measurements were taken, the wind speed was 5 to 14 miles per hour, which is on the lower range of typical wind speeds in the summit region. Despite this, wind noise was generally the dominant noise at the remote sites; this is typical for such locations. ” Ex. A-1 at 2-33 (emphasis added).
156	17	The Observatory and Access Way, fall within the Mauna Kea Summit Region Historic District but would have minimal adverse impact on the character of the District. (CDUA Ex. A-001 :P2-6)	Not in dispute.
157	17	Paving approximately 1,600 feet of the Access Way. (CDUA Ex. A-001:P2-14)	Misleading. Partial quotation. Excerpt goes on to state that “[t]hese impacts are all expected to be less than significant.” Ex. A-1, Section 2 at 2-14.
158	17	Applicant states that the batch plant staging area is roughly 4 acre area and they will continue to use it for storing bulk materials and a concrete Batch Plant. (CDUA Ex. A-001:PI-13; PDF 24)	Misleading. Partial quotation. Excerpt states: “[t]he Batch Plant Staging Area is a roughly 4-acre area northwest of where the Mauna Kea Access Road forks near the summit (see Figure 1.3. This area will be used primarily for storing bulk materials and a concrete Batch Plant, as it has been in the past during construction of other observatories and roads.” Ex. A-1, Section 1 at 1-13.

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159	Project will have little impact on the integrity of cinder cones, including Kukahau'ula. (CDUA Ex. A-001 :P2-8)	17	Not in dispute.
160	Surface geologic structures present in the Project areas, such as lava flow morphology and glacial features, will unavoidably be removed. (CDUA Ex. A-001:P2-18)	17	Misleading. Partial quotation. Excerpt states: "Surface geologic structures present in the Project areas, such as lava flow morphology and glacial features, will unavoidably be removed. These geologic features are neither unique nor exceptional and better examples exist elsewhere on Mauna Kea. Associated impacts will be less than significant. " Ex. A-1, Section 1 at 2-18 (emphasis added).
161	Applicant states that the acreage that will be disturbed by construction of the proposed TMT Access Way is 3.6 total disturbances and 1.9 previously disturbed. (CDUA Ex. A-0.01 :1-3; PDF 24)	17	Misleading. Partial quotation. Excerpt states that "Total Disturbance" will be 3.6 acres, and the "Portion of Total that has Previously been Disturbed" is 1.9 acres. The 3.6 acres is not in addition to the previously disturbed 1.9 acres, but includes that portion. Ex. A-1, Section 1 at 1-13.
162	Mr. Sanders stated, "We would have to enlarge the five acres." (Tr. 1/4/17:V21:P36:L14-15)	17	Misleading. Presented out of context. Question asked whether additional space would be needed to accommodate cranes, material, etc. for the construction. Tr. 01/04/17 at 36:3-15.

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163	17	Mr. Sander stated, "That 12- and-a-half acres is the acreage in which we will do disturbance of the ground, in other words, construction related disturbance of the ground". Tr. (1/4/17:V21 :P49:L6-9.)	Misleading. Presented out of context. Testimony was that accessway would occupy three acres, the construction footprint would occupy five and the batch plant would occupy four acres for a total of twelve. 01/04/17 at 48:19 – 49:9
164	18	Mr. Sanders stated, "Yes. So that sentence In Section H, I guess, that is construction areas, the previous page, the previous sections describe the work on the access way, the Site, and Hale Pohaku. This section discusses additional areas that are going to be temporarily disturbed. (Tr. 1/4/17:V21 :P17:L14-15).	Citation does not support the proposition. Citation is inaccurate – quote is from 01/04/17 at 17:20-25.
165	18	Mr. Sander admitted that the TMT management plan, saying they may bring base course from other aggregate, "It said that at the time this was written, but I don't believe that's our plan now. Our plan now is to prepare rock crushing of appropriate size and do it with local material meaning on the mountain." 1/4/17 Tr. V21P42L17-24.	Mischaracterization. Dr. Sanders did not "admit," but merely confirmed that the TMT Management Plan speaks for itself, but the current plan differs in that local material will be used.
166	18	Mr. Sander stated We also went to the batch plant area which we will be temporarily disturbed during construction. 113/17 Tr.V.20P.39L.8-9	Misleading. Presented out of context. Dr. Sanders was describing the process of cataloging original site conditions. 01/03/17 at 38:24 – 39:19.

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167	18	Mr. Sanders admitted that "Yeah, the batch plant hasn't been studied carefully ", if TMT and decommission construction will be using the current size of the batch plant. 1/3117 Tr.V.20P.230L22-25 and P.231L.1	Citation does not support the proposition. Citation is inaccurate. Misleading. Presented out of context. Question pertained to "possible synergistic effect" of trying to decommission more than one site while building the TMT and whether that might exceed the limitations of the current planned batch plant, necessitating expansion. Dr. Sanders answered "I don't think that's a serious issue, but it hasn't been studied carefully." 01/03/17 at 230:16 – 231:1.
168	18	Mr. Sander stated, "So that was contained, that was part of the early plans for the release of heat, waste heat from the observatory. The plan was to go from the mechanical room in the support building where the air-conditioning equipment chillers are. And the waste heat would go through an underground tunnel and vent in that vent that you're talk-- that you're showing in that picture. We no longer have that as part of our plan. " Tr.1 /4117V;21 :P47:L9-17	Misleading. Presented out of context. Incomplete. Dr. Sanders testified thereafter that "[w]'re just going to vent whatever warmth comes out of the air-conditioning chillers out the side of the building, like most buildings." 01/04/17 at 47:20-22.
169	18	Access Way is also the best from the viewpoint of minimizing visual and physical impacts ... (CDUA Ex. A-001 :P1-13)	Not in dispute.

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170	18	Construction and decommissioning of the proposed project, there will be adverse impact due to noise, traffic, dust, visual intrusion, and the increase in human presence on the mountain and adverse impacts potential disturbance beyond the project limits. (CDUA Ex.A-001 :P2-7; PDF 38) HAR § 11-46 establishes HAR § 11 -46-7 HAR § 1 1 -46-8	Misleading. Partial quotation. Excerpt states: "During the construction and decommissioning of the proposed project, there will be temporary adverse impacts due to noise, traffic, dust, visual intrusion, and the increase in human presence on the mountain; possible adverse impacts during construction and decommissioning also include potential disturbance beyond the project limits. Although there is the potential for accidents to occur, through compliance with all applicable rules, regulations, and requirements for the project type and location, these potential temporary impacts associated with construction and decommissioning will be less than significant. " Ex. A-1, Section 2 at 2-7 (emphasis added).
171	18	The Project will not block or substantially obstruct the identified views and viewplanes of the mountain, thus the Project's visual impact will be less than significant. (CDUA Ex. A-001 :P1-17)	Citation does not support the proposition. Citation is inaccurate. Correct citation is Ex. A-1, Section 2 at 2-17.
172	19	The Project, however, will still add visual element to the Northern Plateau. (CDUA Ex. A-001:P27)	Misleading. Partial quotation. Citation does not support the proposition. Citation is incorrect (see below). Excerpt states: "The TMT project will not be visible from the summit of Mauna Kea or from Lake Waiau but will be visible from within the Northern Plateau as well as the northern ridge of Kūkahau'ula, where other astronomical facilities are located

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			<p>and are visible. Views from the northern ridge of Kūkahau'ula are presently dominated by other astronomical facilities including Subaru, Keck and the Canada-France-Hawaii observatory. It should be noted that, due to the TMT project's design, the TMT will be at a lower elevation and various changes have been made to the dome and support structure to minimize the Project's visibility. It will not block the view of Maui from the northern ridge. The Access Way for the Project incorporates design components that are intended to mitigate visual impacts, including the coloring of pavement (where used) to better blend with the surroundings. The Project, however, will still add a visual element to the Northern Plateau." Ex. A-1, Section 2 at 2-27.</p> <p>Overall, the credible and substantial evidence in the record supports the following: "The TMT Project will add a visual element to the summit of Mauna Kea, but it will be one such element among many. The incremental increase in cumulative visual impact due to the TMT Project will be less than significant. Therefore, the TMT Project will not have a substantial adverse impact on the visual resources of Mauna Kea. WDT Hayes at</p>

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173	19	<p>Table 7.5 summarizes the results of the silhouette analysis for 13 representative viewpoints where the TMT Observatory may be visible. The purpose of the analysis was to determine whether the view of the facility will be a full or partial silhouette against the sky or whether it will be seen against the backdrop of Mauna Kea. (CDUA Ex. A-001 :P7-8; Exhibit S-31b)</p>	<p>21-23." UH-TIO FOF ¶795</p> <p>The credible and substantial evidence in the record supports the following: "The TMT Project will add a visual element to the summit of Mauna Kea, but it will be one such element among many. The incremental increase in cumulative visual impact due to the TMT Project will be less than significant. Therefore, the TMT Project will not have a substantial adverse impact on the visual resources of Mauna Kea. WDT Hayes at 21-23." UH-TIO FOF ¶795</p>

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174	19	<p>The finish for the TMT Observatory dome will be a reflective aluminum-like finish, similar to that of the Subaru observatory. The use of a reflective aluminum-like finish was based on the following considerations (1) visibility of the dome, (2) optimum performance of the observatory, and (3) reduced need of cooling air within the dome during the day. (CDUA Ex. A-001 :P7-9; Exhibit S-31c)</p>	<p>Misleading. Partial quotation. Excerpt states: "The finish for the TMT Observatory dome will be a reflective aluminum-like finish, similar to that of the Subaru observatory. The use of a reflective aluminum-like finish was based on the following considerations (1) visibility of the dome, (2) optimum performance of the observatory, and (3) reduced need of cooling air within the dome during the day. When considering the visibility of the dome, the aluminum-like exterior finish was selected over white and brown because the aluminum-like finish reflects the colors of the sky and ground, which helps the dome blend into its setting and reduces the visual impact whether the summit is bare or covered in snow." Ex. A-1, Section 7 at 7-9.</p>
175	19	<p>The Visual impacts of the TMT Observatory, which will house a telescope with a primary mirror 98 feet (30 meter) <i>in</i> diameter. are also due to the <i>size</i> of the dome enclosure. The diameter of the dome is 216 feet. (CDUA Ex.A-001 :P4-30; White Tr. 1 0/20/ 16:V1 :P76:L18-23)</p>	<p>Misleading. Partial quotation. Excerpt states: "The visual impacts of the TMT Observatory, which will house a telescope with a primary mirror 98 feet (30 meters) in diameter, are also due to the size of the dome enclosure. The diameter of the dome is 216 feet. Because the center of the dome will be placed only 36 feet above grade, the observatory will have a height of approximately 180 feet above grade level. While this will be the tallest observatory on Mauna Kea, it has been</p>

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			<p>designed to minimize the height of the structure, in turn minimizing the visual impacts.</p> <p>The telescope itself has been designed to be much shorter, with a focal ratio 14 of f/1.0, to allow for the smallest dome possible. In addition, the enclosure has been designed to fit very tightly around the telescope, leaving just enough room for a person, only about 20 inches, between the telescope and the dome. For comparison purposes, the Keck Observatory consists of two telescopes each with mirrors 33 feet in diameter with a focal ratio of f/1.75; the diameter of each Keck dome is 121 feet. If the TMT Observatory were to use the same ratio of mirror-to-dome size, it would result in a dome with a diameter of 364 feet, almost twice the current measurement.” Ex. A-1, Section 4 at 4-30.</p>

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176	19	The 2000 Master Plan includes a discussion of a large "Next Generation Large Telescope (NGLT) telescope such as the TMT. The 2000 Master Plan recognizes that the size of such facilities makes the visual considerations very important to siting and design. (CDUA Ex. A-001 :P7-2)	Misleading. Partial quotation. Excerpt states: "The 2000 Master Plan includes a discussion of a large "Next Generation Large Telescope (NGLT) telescope such as the TMT. The 2000 Master Plan recognizes that the size of such facilities makes the visual considerations very important to siting and design, and recommends siting such a facility within Area E of the Astronomy Precinct because it would "minimize its visibility." The proposed TMT site is in accord with this recommendation." Ex. A-1, Section 7 at 7-2 (emphasis added in bold).
177	19	It will be visible from other locations within the summit region, primarily the northern plateau and the northern ridge of Kūkahau'ula where the Subaru, Keck, IRTF, and CFHT observatories are located. (CDUA Ex. A-001:P7-9)	Misleading. Partial quotation. Excerpt states: "Although the TMT Observatory will not be visible from the summit of Mauna Kea (#16) or from Lake Waiau (#17) as shown on Figure 7.1, it will be visible from other locations within the summit region, primarily the northern plateau and the northern ridge of Kūkahau'ula where the Subaru, Keck, IRTF, and CFHT observatories are located." Exhibit A-1, Section 7 at 7-9.

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178	19	The TMT Observatory will appear in the view directly toward the summit from only a few of the shrines on the northern plateau. (CDUA A-001 page 7-13)	The credible and substantial evidence in the record supports the following: "The TMT Project will add a visual element to the summit of Mauna Kea, but it will be one such element among many. The incremental increase in cumulative visual impact due to the TMT Project will be less than significant. Therefore, the TMT Project will not have a substantial adverse impact on the visual resources of Mauna Kea. WDT Hayes at 21-23." UH-TIO FOF ¶795
179	19	The proposed Access Way will also result in a visual effect (particularly from a cultural perspective) as it passes within the Kukahau'ula Historic Property. (CDUA A-001 page 7-13)	Misleading. Partial quotation. Excerpt states: "The proposed Access Way will also result in a visual effect (particularly from a cultural perspective) as it passes within the Kukahau, ula Historic Property. However, as it would follow an existing route, project-related work will simply modify an existing visual feature rather than introduce an entirely new one." Ex. A-1, Section 7 at 7-13 (emphasis added).

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180	19	<p>Description-of Historic Properties and Traditional and Customary Practices, will have a substantial adverse impact to the view plain when the people are in full prayer on the customary spiritual, religions practices on Mauna a Wakea (also know as Mauna Kea). (CDUA Exhibit A-001 , page 4-1</p>	<p>Citation does not support the proposition. Misrepresentation. Exhibit A-1 does not support the proposed finding, and in fact, states that “[t]o some individuals, the Project could represent a significant impact on the suitability of the northern plateau area for spiritual observances and offerings. However, it would not result in any adverse impact on Native Hawaiian rights. The majority of the areas within the MKSR where observances and rituals are believed to occur would not be affected by the Project.</p> <p>Further, while the introduced elements associated with existing observatories may have had an effect on the perceived quality of the observances conducted, or may have caused some practitioners to conduct their observances further away from the vicinity of the observatories, there is no evidence suggesting that the presence of the existing observatories has prevented or impacted those practices. Therefore, the Project is not anticipated to significantly impact the resources available on Mauna Kea used for traditional and customary Native Hawaiian rights involving pilgrimage, prayer, shrine construction and offerings.” Ex. A-1, Section 4 at 4-7 (emphasis added).</p>

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181	20	Mr. Sanders admitted, "So I think it's fair to say that largely, the open space is preserved, but not perfectly." Tr. 01 /4/2017, V. 21 at 80-81:23-25, 1-12.	Misleading. Partial quotation. Dr. Sanders testified: "And the Astronomy Precinct is 500 acres, so we are introducing something which is about one percent of the Astronomy Precinct. So, yes, it affects the open space, but we're introducing something that occupies only one percent of the open space. So I think it's fair to say that largely the open space is preserved, but not perfectly." 01/04/17 at 80:5-12.
182	20	Overall the existing level of cumulative visual impacts from the past projects at the summit is considered to be substantial, significant and adverse. If the TMT is built the TMT project would represent an additional increment. Cumulative impact is the sum of increments, essentially, and would add to the cumulative impact that is substantial, significant and adverse. (Hayes Tr.10/25116:VI3:PI55:L10-25 and P156:L1-6)	Misleading. Partial quotation. Mr. Hayes' testimony in response to the following line of questions was as follows: A. And what was the quote again? Q. Overall the existing level of cumulative visual impacts from the past projects at the summit is considered to be substantial, significant and adverse. A. Yes. Q. If the TMT is built, would the TMT add to the cumulative visual impact that has already been described by you as substantial, significant and adverse? A. The TMT project would represent an additional increment, yes. Q. So it would add to the cumulative visual impact of astronomy development? A. It would be an increment of impact, yes. Q. What is the difference between

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			<p>increment and cumulative? A. So cumulative impacts is the sum of increments, essentially. Q. So the TMT would add to the cumulative visual impact that you have already stated is substantial, significant and adverse? A Yes. 10/25/16 at 155:9 – 156:6.</p> <p>To the extent this proposed finding of fact, refers to the FEIS for the TMT Project, The Hearing Officer and BLNR are not bound by the findings in the FEIS. See <u>Kilakila 'O Haleakala v. Bd. of Land and Natural Resources</u>, 138 Hawai'i 383, 402, 382 P.3d 195, 214 (2016). "Rather, an environmental impact statement is 'merely an informational document[,] and its findings neither presume approval nor denial of a conservation district use application.'" <u>Id.</u></p>
183	20	Ms. Aloua testified that the TMT project will not help preserve or improve upon the natural beauty and open space characteristics of Mauna Kea (Tr. 2/ 15/2017:V36:P42)	Not credible. See UH-TIO FOF No. 602.

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184	20	Mr White testified that the cultural and recreational viewplane would be altered, and would be clearly visible, and that an 18 story, five acre project would or could impact the view between archaeological and or cultural sites. Tr. 10/1/16 Vol I: 76:9-23	Incomplete. Misleading. Presented out of context. Mr. White clarified that “when I say impact, it would be visible from some of those heights, so if you were trying to look between them, it’s conceivable that it would be in the way. It would be more certain that if you were standing at one, and looking in the direction on the others that you might see the facility. This is the way you see the existing observatories from those sites.” 10/20/16 at76:25 – 77:7.
185	20	It does not entail substantial air emissions, (Exhibit CDUA Ex. A-00 I P2-28)	Not in dispute.

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186	20	Construction and decommissioning of the proposed project, there will be adverse impact due to noise, traffic, dust, visual intrusion, and the increase in human presence on the mountain and adverse impacts potential disturbance beyond the project limits. (Exhibit CDUA Ex. A-001 page 2-7; PDF 38) HAR § 11-46 establishes HAR §11-46-7 HAR §11-46-8 (Tr. 10/20/16:V1P:75:L3)	Misleading. Partial quotation. Excerpt from Exhibit A-1 states: "During the construction and decommissioning of the proposed project, there will be temporary adverse impacts due to noise, traffic, dust, visual intrusion, and the increase in human presence on the mountain; possible adverse impacts during construction and decommissioning also include potential disturbance beyond the project limits. Although there is the potential for accidents to occur, through compliance with all applicable rules, regulations, and requirements for the project type and location, these potential temporary impacts associated with construction and decommissioning will be less than significant. " Ex. A-1, Section 2 at 2-7 (emphasis added). Citation to transcript does not support proposed finding.
187	20	Potential impacts related to dust and exhaust emissions from vehicular travel and emissions related to operation and maintenance activities will not substantially affect the existing air quality or climate. Sky illumination effects will be limited and not substantial. TMT project impacts are expected to be less than significant. (CDUA Ex. A-001:P2-22)	Not in dispute. Citation incorrect.
188	20	Mr. Sander admitted that dust caused by extraction and movement of rocks will have an impact on the air quality. (Tr. 1/3/17:V20:P.74:L22-25)	Citation does not support the proposition. References unrelated testimony.
189	20	Mr. Sander stated. "During grading and breaking up rock will be the dustiest portion. (Tr. 2/3/17:V20:P113:L.4-1 0)	Citation does not support the proposition. References unrelated testimony.

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190	21	<p>The summit region, which includes the Mauna kea Summit Region Historic district and the Kukahau'ula TCP, is a sacred area in Hawaiian culture and serves as a site for individual and group ceremonial and spiritual practices. The approximately 5-acre area to be occupied by the TMT observatory structure would not be available for future cultural practices of this nature. (CDUA Ex. A00IP: 4-7)</p>	<p>Misleading. Presented out of context. Section 4.2.1 of the CDUA goes on to state that “[t]he majority of the areas within the MKSR currently used for shrine construction would not be affected by the Project” and “[t]he majority of the areas within the MKSR where observances and rituals are believed to occur would not be affected by the Project.” Ex. A-1, Section 4 at 4-7.</p> <p>No credible evidence was presented to establish that customary and traditional practices occur within the area E location site of the TMT Observatory. See UH-TIO FOF 624 and 627. There is no reliable probative and substantial evidence that his or his referenced practices are within the bundle of rights protected by article XII, section 7 of the Hawaii State Constitution.</p> <p>Not in dispute the certain individuals hold such spiritual and religious beliefs; however, it cannot be generalized as true for all Hawaiian people. The fact that certain individuals may hold and/or express such religious or spiritual beliefs regarding <u>inter alia</u>, the sacredness of Mauna Kea, is again not in dispute, but the legal impact of such beliefs is clearly in</p>

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191	21	Increase in number of trips to the summit area of Mauna Kea and associated production of dust and noise. (CDUA Ex. A-001 :P3-13)	<p>dispute. There is no reliable probative and substantial evidence that the substance of the belief is factual.</p> <p>Misleading. Presented out of context. Excerpt states: “[p]otential less than significant adverse impacts associated with the Project include . . . [i]ncrease in number of trips to the summit area of Mauna Kea and associated production of dust and noise.” Ex. A-1, Exhibit B, Section 3 at 3-13 (emphasis added).</p>
192	21	Native Hawaiian traditions state that ancestral akua (gods, goddesses, deities) reside within the mountain summit area . These personages are embodied within the Mauna Kea landscape and they are believed to be physically manifested in earthly form as various pu'u (hills) and as the waters of Lake Waiau . (CDUA Ex. A-001:P2-1). (Cultural Resource Management Plan Exhibit ("CRMP") A-011;	<p>Citation is incomplete. Reference is to Ex. A-1, Exhibit B, Section 2 at 2-1.</p> <p>The TMT Observatory is not being built on any pu'u. The closes pu'u to the 5 acre area E site is Pu'u Poliahu, which is 0.78 miles from the site. See Ex. C-18. Lake Waiau is located 1.42 miles from the 5 acre area E site. <u>See id.</u> There is no credible evidence that the building of the TMT Project will have any substantial adverse impact to these locations.</p>

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193	21	<p>Project's impact to the cultural, spiritual and sacred quality of the summit region will be significant. (CDUA Ex. A-00 I:P4-6)</p>	<p>Misleading. Partial quotation. Presented out of context. Appropriate portion of CDUA section 4.2 states: "There are diverse opinions concerning the Project's potential impact on cultural resources. For those of the opinion that any use, development, or disturbance of Mauna Kea by someone other than a Native Hawaiian is significant and unmitigable, the Project's impact to the cultural, spiritual, and sacred quality of the summit region will be significant." Ex. A-1, Section 4 at 4-6.</p> <p>Not in dispute the certain individuals hold such spiritual and religious beliefs; however, it cannot be generalized as true for all Hawaiian people. The fact that certain individuals may hold and/or express such religious or spiritual beliefs regarding, <u>inter alia</u>, the sacredness of Mauna Kea, is again not in dispute, but the legal impact of such beliefs is clearly in dispute. There is no reliable probative and substantial evidence that the substance of the belief is factual.</p>

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194	21	<p>The summit region, which includes the Mauna Kea Summit Region Historic District and the Kukahau'ula Traditional Cultural Practices ("TCP"), is a sacred area in Hawaiian Culture and serves as a site for individual and group ceremonial and spiritual practices. (CDUA Ex. A-00 1:P4-7)</p>	<p>See response to proposed finding of fact 91 above.</p> <p>Not in dispute the certain individuals hold such spiritual and religious beliefs; however, it cannot be generalized as true for all Hawaiian people. The fact that certain individuals may hold and/or express such religious or spiritual beliefs regarding, <u>inter alia</u>, the sacredness of Mauna Kea, is again not in dispute, but the legal impact of such beliefs is clearly in dispute. There is no reliable probative and substantial evidence that the substance of the belief is factual.</p>

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195	21	To some individuals, the Project could represent a significant impact on the suitability of the Northern Plateau area for spiritual observances and offerings. (CDUA Ex.A-001 :P4-7)	Misleading. Partial quotation. Presented out of context. Appropriate portion of CDUA section 4.2.1 states: "To some individuals, the Project could represent a significant impact on the suitability of the northern plateau area for spiritual observances and offerings. However, it would not result in any adverse impact on Native Hawaiian rights. The majority of the areas within the MKSR where observances and rituals are believed to occur would not be affected by the Project." Ex. A-1, Section 4 at 4-7.
196	21	The site of the proposed TMT Observatory is over one mile from the nearest known or possible burial identified during past archaeological studies. (CDUA Ex.A- 00 1:P4-8)	No credible evidence was presented to establish that customary and traditional practices occur within the area E location site of the TMT Observatory. See UH-TIO FOF 624 and 627. Not in dispute.
197	21	Use of the summit region as a repository for human burial remains, by means of interment, particularly on various pu'u, during early times, and more recently by means of releasing ashes from cremations. (CDUA Ex. A-00 1:P2-2)	Misleading. Presented out of context. The site of the proposed TMT Observatory is over one mile from the nearest known or possible burial identified during past archaeological studies. No evidence was presented of burials on the TMT Project site. Citation is incomplete. Excerpt is from Ex. A-1, Exhibit B, Section 2 at 2-1.

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198	21	<p>"State Inventory of Historic Places "SIHP" No.- 16172 is located about 225 feet north of the proposed TMT Observatory site and consists of a single upright with several support stones. A Bishop Museum entomologist also reported seeing a crude C-shaped structure and other walls in this general area in 1982. (CDUA Ex A-1:P4-1.)</p>	<p>Misleading. Partial quotation. The excerpt from CDUA section 4.1.1 states in its entirety: "SIHP No. -16172 is located about 225 feet north of the proposed TMT Observatory site and consists of a single upright with several support stones. A Bishop Museum entomologist also reported seeing a crude C-shaped structure and other walls in this general area in 1982. None of these walls were observed during the 1995 or 2005 field inspections of the site." Ex. A-1, Section 4 at 4-1.</p>
199	22	<p>The sites in the adze quarry and many of the shrines embody distinctive characteristic of traditional Hawaiian stone tool manufacture by craft specialists and a distinctive type of shrine construction found in only a few other places in the Hawaiian Islands, these make the di strict significant. (CRMP Ex A-011 :P2-49)</p>	<p>Misleading. Partial quotation. Last sentence of excerpt states: "[t]hese make the district significant under criterion 'c' [of the National Register criteria]". Ex. A-11 at 2-49. The adze quarry is located 2.25 miles from the proposed location for the TMT Observatory. Ex. C-18. There is no evidence that the TMT Project will have any adverse impact on the adze quarry.</p>

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200	22	The Batch Plant Staging Area is adjacent to the southwestern boundary of the Kūkahau'ula TCP, across the Mauna Kea Access Road. (CDUA Ex. A-001 :P4-3)	Misleading. Partial quotation. Excerpt from CDUA section 4.1.2 states: "The Batch Plant Staging Area is adjacent to the southwestern boundary of the Kūkahau,ula TCP, across the Mauna Kea Access Road. It has undergone considerable ground disturbance over the years due to a series of construction-related activities. No historic properties are known to be present in this area and none has been recorded during various surveys." Ex. A-1, Section 4 at 4-3 (emphasis added).
201	22	SIHP No. -16167 is located approximately 500 feet east of the Access Road and about 1,300 feet southeast of the proposed TMT Observatory site and consists of one, possibly two, uprights placed in a bedrock crack . In 1995, the site was revisited and both stones were found in a vertical position. (CDUA A-001 page 4-1)	Not in dispute.
202	22	SIHP No. -16166 is approximately 350 feet east of the Access Road and 1,600 feet southeast of the proposed TMT Observatory site and is a multi-feature shrine with a total of eight, possibly nine uprights arranged in two groups . When the site was revisited in 1999 it was noted that several of the uprights had been reset in a vertical position along the edge of the outcrop. (CDUA A-001 page 4-3)	Not in dispute.
203	22	The site proposed for the TMT Observatory is nearly one-half mile northwest of Kūkahau'ula, and the Access Way leading to the observatory would intersect the northwestern edge of Kūkahau'ula for approximately 800 feet . Kūkahau'ula (SIHP No. -21438) includes the summit cinder cones (referred to separately as Pu'u Wekiu, Pu'u Kea, and Pu 'u Hau'oki) and covers roughly 463 acres, of which nearly one third is within the Astronomy Precinct. (CDUA A-001 page 4-3)	Misleading. Presented out of context. The placement of the Access Way was recommended by the State Historic Preservation Division to minimize adverse effects on Kūkahau'ula. See UH-TIO FOF ¶310.

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204	22	"SIHP No.- 21449 were documented in 2005; it is located in Area E approximately 200 feet east of the Access Road and 700 feet south of the proposed TMT Observatory site." (CDUA Exhibit A-1, page 4-3.)	Not in dispute to the extent the document speaks for itself.
205	22	Performance of prayer and ritual observances important for the reinforcement of an individual's Hawaiian spirituality.(CDUA Ex. A-001 :P2-1)	Citation is incomplete. Excerpt taken from Ex. A-1, Exhibit B, Section 2 at 2-1.
206	22	Collection of water from Waiau for a variety of healing and other ritual uses.(CDUA Ex. A-001:P4-7)	Misleading. Partial quotation. Section 4.2.2. of the CDUA states: "Water from Lake Waiau is collected by some cultural practitioners for use in healing and ritual practices. The Project would not affect that practice, nor would it affect the quality of the water in Lake Waiau. There will be no adverse effect associated with the Project on this traditional and customary Native Hawaiian right. " Ex. A-1, Section 4 at 4-7 (emphasis added).
207	22	Deposition of Piko (umbilical cords) at Waiau and the summit peaks of Mauna Kea.(CDUA Ex. A-00 1 :P2-1)	Not in dispute. No credible evidence that the deposition of Piko occurs on the proposed site for the TMT Observatory.
208	22	Belief in the upper mountain region of Mauna kea, from the Saddle area up to the summit, as a sacred landscape, as the personification of the spiritual and physical connections BETWEEN one's ancestors, history, and the heavens. (CRMP Ex.A-011)	Misleading. Partial quotation. Presented out of context. Section 4.2.1.1 of the CRMP states: "The cultural impact assessment (CIA) for the Master Plan EIS recognized two broad categories: (1) traditional and customary cultural practices and beliefs, and (2) contemporary cultural practices. Traditional and customary practices and beliefs were defined as those taking place in the summit region as a whole, as well as

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			<p>those occurring at specific locations within the Science Reserve boundaries. The following practices and beliefs were listed under this category (PHRI 1999:39)</p> <p>Belief in the upper mountain region of Mauna Kea, from the Saddle area up to the summit, as a sacred landscape—as the personification of the spiritual and physical connection between one's ancestors, history, and the heavens”</p> <p>Ex. A-11 at 4-11 – 4-12.</p> <p>No credible evidence was presented to establish that customary and traditional practices occur within the area E location site of the TMT Observatory. <u>See</u> UH-TIO FOF 624 and 627. There is no reliable probative and substantial evidence that his or his referenced practices are within the bundle of rights protected by article XII, section 7 of the Hawaii State Constitution.</p>

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209	23	Association of unspecified traditional navigation practices and customs with the summit area. (CDUA Ex. A-001 :P2-2)	Misleading. Presented out of context. No credible evidence was presented to establish that customary and traditional practices occur within the area E location site of the TMT Observatory. <u>See</u> UH-TIO FOF 624 and 627. There is no reliable probative and substantial evidence that his or his referenced practices are within the bundle of rights protected by article XII, section 7 of the Hawaii State Constitution.
210	23	Annual Calendrical rites (i.e. solstice and equinox observations) that take place at the summit of Kukahau'ula. (TMT Management Plan Ex. A-001 :P2-2)	Misleading. Presented out of context. No credible evidence was presented to establish that customary and traditional practices occur within the area E location site of the TMT Observatory. <u>See</u> UH-TIO FOF 624 and 627. There is no reliable probative and substantial evidence that his or his referenced practices are within the bundle of rights protected by article XII, section 7 of the Hawaii State Constitution.

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211	23	<p>Project will have a substantial impact to construction noise and activities in the vicinity of cultural practices. (CDUA A-001 page A-10; PDF 222)</p>	<p>Misrepresentation. Relevant excerpt does not state that “project will have a substantial impact.” The excerpt states: “[a]s in the case of the Observatory and Access Way, the Project will meet with OMKM and Kahu Kū Mauna to identify cultural events that would be sensitive to construction noise in the vicinity of the Batch Plant Staging Area. On up to four days per year, identified by Kahu Kū Mauna, the Project will endeavor to reduce construction noise and activities in the vicinity of cultural practices.” Ex. A-1, Appx. A at A-9 (emphasis added).</p> <p>No credible evidence was presented to establish that customary and traditional practices occur within the area E location site of the TMT Observatory. See UH-TIO FOF 624 and 627. There is no reliable probative and substantial evidence that his or his referenced practices are within the bundle of rights protected by article XII, section 7 of the Hawaii State Constitution.</p>
212	23	<p>In addition, the portion of the Access Way which follows and goes over an existing single-lane, 4-wheel drive road on the flank of the Pu'u Hau 'oki cinder cone will result in a minor disturbance of the Kukahau'ula Historic Property.(CDUA Ex. A-001 :P2-6)</p>	<p>Misleading. Partial quotation. Presented out of context. Relevant excerpt of CDUA section 2.4 states: “It should be noted that locating the TMT project within the Northern Plateau (Area E) will result in less than significant</p>

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			<p>impact on wēkiu bug habitat, historic properties and viewplanes, including viewplanes of greatest concern from within the summit area, and existing facilities. The Observatory and Access Way, fall within the Mauna Kea Summit Region Historic District but would have minimal adverse impact on the character of the District. In addition, the portion of the Access Way which follows and goes over an existing single-lane, 4-wheel drive road on the flank of the Pu,,u Hau,,oki cinder cone will result in a minor disturbance of the Kūkahau'ula Historic Property. It should be further noted that natural resources, such as habitat, species and geology located in the TMT project area are not unique or critical to the survival of any species in the Mauna Kea Science Reserve." Ex. A-1, Section 2 at 2-6 (emphasis added).</p> <p>The placement of the Access Way was recommended by the State Historic Preservation Division to minimize adverse effects on Kūkahau'ula. See UH-TIO FOF ¶310.</p>
213	23	<p>Abad admitted, the TMT CDUA (Exhibit R-1) contained inaccurate and misleading statements that cultural activities have not been associated with a specific historic property in or near the Project Area. Tr. 01/19/2017. V. 27 at 60:6-20.</p>	<p>Not credible. See UH-TIO FOF Nos. 604-608. Inaccurate/False. Misleading. Provided out of context. Dr. Abad testified that she was aware of recently</p>

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			<p>constructed ahu:</p> <p>Q. Have you previously been to the proposed TMT site? A. Yes.</p> <p>Q. Have you seen any of the ahu recently constructed at the proposed TMT site? A. Yes.</p> <p>Q. Based upon your knowledge and experience, are these ahu examples of continued worship practices noted in the second bullet on this list just referenced? A. Yes.</p> <p>Q. Based upon your knowledge and experience, are these ahu associated with traditional and customary Native Hawaiian practices? A. Yes.</p> <p>01/19/2017 at 59:16 – 60:4. Dr. Abad was then shown the statement in question, pertaining to historic sites:</p> <p>Q. Please take a look at Exhibit R-1 on the following page, 4 through 6. It states, For the most part, none of these activities has been associated with a specific historic property such as a shrine or worship (sic) that has been identified in or near the areas of the proposed action. Based upon your knowledge and</p>

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			<p>experience, would this statement be considered inaccurate or misleading? A. Yes.</p> <p>01/19/2017 at 60:5-13. Dr. Abad's testimony does not distinguish between contemporary and historic sites and does not recognize the legal significance of this difference. As such, her statement regarding the veracity of the document in question, is not credible.</p>
214	23	<p>Abad admitted, despite these acknowledgments, "the TMT CDUA fails to address the full range of sites that should be considered in [the] regional analysis" required pursuant to HAR §13-5-30(c)(4). Ex. B.08a at 5. HAR § 13 -5-30(c)(4) requires BLNR, prior to granting a CDUP, to determine that a "proposed land use will not cause substantial adverse impact to existing natural resource within the surrounding area. community, or region[.]" Id.; Tr. 01 / 19/2017, V. 27 at 22: 17-25</p>	<p>Not credible. See UH-TIO FOF Nos. 604-608</p>
215	23	<p>CDUA (Exhibit R-1) contained inaccurate and misleading statements that cultural activities have not been associated with a specific historic property in or near the Project Area. Tr. 01119/2017, V. 27 at 60: 6-20</p>	<p>Not credible. Dr. Abad's testimony is not credible. See UH-TIO FOF Nos. 604-608</p>
216	23	<p>McCoy's analysis connected cultural practices, archaeological sites, and physical remains, and this bridging was made possible by using a regional perspective and knowledge of fundamental characteristics of Hawaiian culture. Tr. 01/19/2017, V. 27 at 35: 3-8.</p>	<p>Misleading. Presented out of context. Citation refers to testimony of Dr. Abad <i>characterizing</i> McCoy's work. Dr. Abad's testimony is not credible.</p>
217	23	<p>CDUA failed to properly assess upright sites or ahu of various shapes and sizes on Mauna Kea, which do not exist in isolation, but are rather alignments that connect to other ahu or ridge peaks, for example. Tr. 01119/2017, V. 27 at 35: 15-25</p>	<p>Not credible. Dr. Abad's testimony is not credible. See UH-TIO FOF Nos. 604-608</p>

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218	23	Mr. Cruz, spent six months researching and interviewing community consultants, including cultural practitioners from Hawaii island. Tr. 2/28/17V42:P102:L1 5-16.	Not credible. Mr. Cruz's testimony is not credible. See UH-TIO FOF No. 203
219	24	Mr. Cruz, research led to the conclusion that there should be "no further action' on the summit of Mauna Kea because of the sacredness of the site." Tr. 2/28/ 17:V42:P1 02:L17-20	<p>Not credible. Mr. Cruz's testimony is not credible. See UH-TIO FOF No. 203.</p> <p>Not in dispute the certain individuals hold such spiritual and religious beliefs; however, it cannot be generalized as true for all Hawaiian people. The fact that certain individuals may hold and/or express such religious or spiritual beliefs regarding, inter alia, the sacredness of Mauna Kea, is again not in dispute, but the legal impact of such beliefs is clearly in dispute. There is no reliable probative and substantial evidence that the substance of the belief is factual.</p>

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220	24	<p>Mr White stated that the TMT project would be developed within the Historic District, and that the project would involve the alteration of the Kūkahau'ūla traditional cultural property, and that it would involve the placement of underground utilities and paving a road on the flank of Pu 'u Hauoki, in the Traditional Cultural Property. Tr. 10/1/16 Vol 1:75:11-25. 76:5-8</p>	<p>Misrepresentation. In response to question whether project would “involve any alteration of the Kūkahau'ūla traditional cultural property,” Mr. White stated “I believe that it would, but there are going to be other people who are going to testify on that topic that are a lot better qualified.” 10.20.16 at 75:24 – 76:1. Likewise, in response to the question of whether “the project [would] involve placement of underground utilities and paving a road on the flank of Pu 'u Auoki in the traditional cultural property,” Mr. White stated “I believe it would.” 10.20.16 at 76:8.</p> <p>The placement of the Access Way was recommended by the State Historic Preservation Division to minimize adverse effects on Kūkahau'ūla. See UH-TIO FOF ¶310.</p>

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221	24	Locating the TMT project within the Northern Plateau (Area E) will result in a significant substantial adverse impact due to the area is in a pristine and untouched landscape which holds natural and environmental resources.(CDUA Exhibit A-001 , Exhibit A. page A-1)	Misrepresentation. Citation does not support the proposition. Inaccurate/False. Section 2.4 of the CDUA states: "It should be noted that locating the TMT project within the Northern Plateau (Area E) will result in less than significant impact on wēkiu bug habitat, historic properties and viewplanes, including viewplanes of greatest concern from within the summit area, and existing facilities." Ex. A-1, Section 2 at 2-6 (emphasis added). Credible and substantial evidence was presented, including directly from other Petitioners and Opposing Intervenors, during the CCH demonstrating that the Astronomy Precinct is substantially or fully developed. See e.g., UH-TIO FOF ¶¶851, 859-864
222	24	The findings of the research performed by TMT may provide inspiration for the people around the world and Hawaii to conserve the earth's and the state's resources.(CDUA Ex. A-001 :P4-37)	Not in dispute. Citation is incomplete. Excerpt is from Ex. A-1, Exhibit B, Section 4 at 4-37.
223	24	The TMT project has been developed to achieve full compliance with all existing State requirements that protect resources on Mauna Kea associated with traditional and customary Native Hawaiian rights.(CDUA Ex A 001:P4-1 0)	Not in dispute.

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224	24	One goal is to "Protect scenic vistas and view planes from becoming obstructed." (CDUA Ex. A-001:P7-1)	<p>Misleading. Presented out of context. Section 7.1.1 of the CDUA states: "The Hawai'i County General Plan (County of Hawai'i, 2005) recognizes the importance of preserving the island's natural and scenic beauty. It establishes goals, policies and standards to identify and protect scenic vistas and viewplanes. One goal is to 'Protect scenic vistas and view planes from becoming obstructed.' The General Plan also provides guidelines for designating sites and vistas of extraordinary natural beauty to be protected, and includes the standard 'Distinctive and identifiable landforms distinguished as landmarks, e.g. Mauna Kea, Waipio Valley.'" Ex. A-1, Section 7 at 7-1.</p>
225	24	"protect the pu'u of Waimea that have cultural, historical and visual importance" and which have "grand views of Mauna Kea." (CDUA Ex. A- 001:P7-1)	<p>Misleading. Presented out of context. Section 7.1.1 of the CDUA states: "The South Kohala Development Plan (County of Hawai'i, 2008) includes a policy to preserve Waimea's sense of place. To do this, the plan recommends the strategy to 'protect the pu'u of Waimea that have cultural, historical and visual importance' and which have 'grand views of Mauna Kea.'" Ex. A-1, Section 7 at 7-1.</p>

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226	24	Increase understanding of the status of Mauna Kea natural resources and address particular threats to these resources to better protect these resources. (CDUA Ex. A-001 :P1-2)	Misleading. Presented out of context. CDUA section 1 states: "The TMT Management Plan was developed with the following objectives in mind. Many of these objectives come directly from the CMP . . . Increase understanding of the status of Mauna Kea natural resources and address particular threats to these resources to better protect these resources." Ex. A-1, Exhibit B, Section 1 at 1-2. Citation is also incomplete.
227	24	Ms. Abad stated, Special emphasis shall be placed on environmental resources that are rare and unique to the region and the project site including natural or humanmade resources of historic, archaeological, or aesthetic significance. (Tr 1/1 9/1 7:V27:P23 :L15-19)	Not credible. To the extent Dr. Abad was testifying as to what HAR Ch. 13-5-30(c) states, the regulation speaks for itself. To the extent she was providing a legal opinion, she is not a legal expert and her testimony is not credible. See UH-TIO FOF No. 608
228	24	Ms. Abad admitted, that the existing natural resources would be bulldozed is my understanding because it's right there in that five acres. It would be destroyed. (Tr. 1/ 19/17:V27:P236:L10-1 4)	Not credible. Unsupported/Unsubstantiated. Testimony is unsupported speculation, based on Dr. Abad's incomplete understanding. See UH-TIO FOF Nos. 604-608. The credible and substantial evidence in the record establishes that there will be no substantial adverse impact to natural resources in satisfaction of HAR 13-5-30(c)(4). UH-TIO FOF ¶¶118-190.

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229	25	Mr. Cruz stated, My formulation and the way that I see it legally is the state has a primary obligation to protect the cultural resources, including the natural resources that are cultural, and to ensure that the rights of the native practitioner are accommodated. (Tr 2/28/17:V42:P208:L8-13)	Not credible. Unsupported/Unsubstantiated. Mr. Cruz is also not a legal expert. See UH-TIO FOF No. 203. The credible and substantial evidence in the record supports the finding that the TMT Project will not cause substantial adverse impact to existing natural resources within the surrounding area, community, or region. See UH-TIO FOF ¶¶433-839; UH-TIO COL ¶¶177-217.
230	25	Major construction activities at the summit, undertaken to build, redevelop, or deconstruct facilities, require at least MKMB and UH Board of Regents approval, BLNR/DLNR permits (such as a CDUP), and appropriate environmental analysis.	Unsupported/Unsubstantiated. No citation to the record.
231	25	Applicant states it will take approximately seven years and workers will work 12-15 hours a day, seven days a week; however some construction phases will require longer work hours. (Exhibit CDUA A-001 page 1-19; PDF 30)	Misleading. Partial quotation. Section 1 of the CDUA states: "it will take approximately seven years from the time the first work is done on the mountain until the telescope is operational. TMT Observatory Corporation expects that construction activities will take place 12-15 hours a day, seven days a week; however, some special operations or construction phases will require longer work hours. Winter weather conditions at the TMT Observatory site will interrupt construction at times, until the dome is completed." Ex. A-1, Section 1 at 1-19.

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232	25	Construction of the proposed facilities, particularly Observatory site and Access Way grading, will involve the use of heavy construction equipment, including that needed for excavation of relatively dense rock. (Exhibit CDUA A-001 page 2-31 and 32; PDF 62 & 63)	Not in dispute.
233	25	With an average construction crew of 50 to 60, it is estimated 9 or 10 vehicles will be required to transport the crew on a daily basis. (CDUA A-001 page 4-26; PDF 188).	Not in dispute.
234	25	Due to the expected increase of heavy traffic during construction there is a chance for more rapid deterioration of the unpaved portions of the Mauna Kea Access Road surface. (CDUA A-001 page 4-26; PDF 188)	Misleading. Partial quotation. Section 4.2.4 states: "Due to the expected increase of heavy traffic during construction there is a chance for more rapid deterioration of the unpaved portions of the Mauna Kea Access Road surface; TMT will arrange for the more frequent grading of the unpaved roadway." Ex. A-1, Exhibit B, Section 4 at 4-26.
235	25	TMT pier foundation will be a depth of approximately 20 feet below the finished floor grade. (CDUA A-001 page B-7; PDF 230)	Misleading. Partial quotation. Appendix B to the CDUA states: "[t]he TMT pier foundation will consist of a continuous, circular outer wall shallow concrete spread footing that will bear on the soil at a depth of approximately 20 feet below the finished floor grade." Ex. A-1, Appx. B at B-7.
236	25	The utility tunnel bearing on the soil at a depth of 21.5 feet below the finished floor. (CDUA A-001 page B-7; PDF 230)	Not in dispute.
237	25	Table -2: Estimated Cut and Fill Volumes: TMT Observatory 13N site Cut 34,000 cubic yards fill 29,000 cubic yards: Access Way Cut 30,000 cubic yards fill 3,000 cubic yards: Batch Plant staging area fill 30,000 cubic yards. (Exhibit S- 31b; A-023 page B-3)	Not in dispute.
238	25	The diameter of the dome is 216 feet. Because the center of the dome will	Misleading. Partial quotation. Presented

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		<p>be placed only 36 feet above grade, the observatory will have a height of approximately 180 feet above grade level. (CDUA A-001 page 4-30)</p>	<p>out of context. Section 4.3.4 of Exhibit B to the CDUA states: "The diameter of the dome is 216 feet. Because the center of the dome will be placed only 36 feet above grade, the observatory will have a height of approximately 180 feet above grade level. While this will be the tallest observatory on Mauna Kea, it has been designed to minimize the height of the structure, in turn minimizing the visual impacts. The telescope itself has been designed to be much shorter, with a focal ratio 14 of f/1.0, to allow for the smallest dome possible. In addition, the enclosure has been designed to fit very tightly around the telescope, leaving just enough room for a person, only about 20 inches, between the telescope and the dome. For comparison purposes, the Keck Observatory consists of two telescopes each with mirrors 33 feet in diameter with a focal ratio of f/1.75; the diameter of each Keck dome is 121 feet. If the TMT Observatory were to use the same ratio of mirror-to-dome size, it would result in a dome with a diameter of 364 feet, almost twice the current measurement." Ex. A-1, Exhibit B, Section 4 at 4-30 (emphasis added).</p>

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239	26	"A roughly 6,000 square foot exterior equipment area on the north side of the support building will include two electrical transformers and electrical service switchboards; three 5,000-gallon underground storage tanks (UST) one for water storage, one for domestic waste storage , and one double-walled for chemical waste storage ; two 25,000-gallon UST for water storage as part of the fire suppression system; and one double-wall 2,000-gallon above-ground storage tank for diesel fuel to power the emergency generator. (CDUA Exhibit A-1, page 1-1 0)	Not in dispute.
240	26	Appendix B, Construction plan states, "Some courser material from on-island quarries will be transported to the TMT Observatory site and used under concrete foundation slabs as "base course". Aggregate from on-island quarries will also be used to make the foundation concrete. (TMT Management Plan Exhibit S-31 b Appendix B, page B-3)	Misleading. Presented out of context. Dr. Sanders clarified that the "plan now is to prepare rock crushing of appropriate size and do it with local material, local meaning on the mountain." 01/04/17 at 42:20-24. See response to FOF/COL # 165, above.
241	26	Construction Plan, Southernmost Cinder Section states, "Where the access Way occurs on the cinder lower slope of Pu'u Hau'oki, the Access Way features will be as illustrated in Figure B-1 - a 12 foot wide paved travel way (and), a four foot paved shoulder with drainage channel and guardrail, and slope graded to 2.5:1. (TMT Management Plan Exhibit S-31 b Appendix B, page B-4)	Misleading. Presented out of context. The placement of the Access Way was recommended by the State Historic Preservation Division to minimize adverse effects on Kūkahau'ula. See UH-TIO FOF ¶310.
242	26	Construction Plan, Lava Flow Section, states, "Throughout the lava flow section, the Access Way features will be as illustrated in Figure B-3, a 24 foot wide gravel travel way (Two lanes), one foot shoulders, and slopes graded to 2.5:1. (TMT Management Plan Exhibit S-31b Appendix B, page B-6)	Correction: parenthetical states "1 lane", not "and". Misleading. Presented out of context. The placement of the Access Way was recommended by the State Historic Preservation Division to minimize adverse effects on Kūkahau'ula. See UH-TIO FOF ¶310.

FOF/ COL #	Page	FOF/COL	Response
243	26	<p>Construction Plan, TMT Observatory 13N Site Grading Plan states, "The TMT pier foundation will consist of a continuous, circular outer wall shallow concrete spread footing that will bear on the soil at a depth of approximately 20 feet below the finished floor grade. There will be a central shallow concrete pad for a pintle bearing, used to bold the center of rotation of the telescope in place when at rest, that will bear on the soil at a depth of 16 feet below finished floor grade. The central shallow concrete pad will be connected to the telescope pier outer wall and footing with six radial concrete spokes. A utility tunnel bearing on the soil at a depth of 21.5 feet below the finished floor elevation will connect the telescope pier with the mechanical equipment room on the utility level of the support building. The utility tunnel for venting warm air from the mechanical room out to the north side of the site will bear on the soil at a depth of 21.5 feet below the finished floor elevation. (TMT Management Plan Exhibit S-31 b Appendix B, page B-7).</p>	<p>There is no dispute that the building of the TMT Project will result in ground disturbing activities. This is not a reason to reject the CDUA.</p>
244	26	<p>As with other activities, there is a potential for accidents, including fire and the accidental release of hazardous materials or solid waste, including trash and construction materials. (FEIS A-003 page S-7)</p>	<p>Misleading. Partial quotation. Presented out of context. The executive summary to the Final EIS states: "As with other activities, there is a potential for accidents, including fire and the accidental release of hazardous materials or solid waste, including trash and construction materials. Through compliance with all applicable rules, regulations and requirements for the project type and location, these <u>potential temporary impacts associated with construction and decommissioning will be less than significant.</u>" Ex. A-3 at S-7 (emphasis added).</p>

FOF/ COL #	Page	FOF/COL	Response
245	26	22.7 gallons of hydraulic oil fluid spilled in the Caltech Submillimeter Observatory ("CSO"). The contaminated backfill of 3,500 lbs, and 1,000 lbs of spent absorbent material was truck out by Pacific Commercial Services. (S-18d)	Incomplete. Misleading. Presented out of context. Irrelevant/Inapplicable. Does not pertain to the project site. See UH-TIO FOF No. 815
246	27	There is a strong interest in the impact of the Project on the socioeconomic landscape of the island and the potential for local residents to work for the Project during construction and operation. (FEIS A-003 page 1-5)	Not in dispute.
247	27	A 300-ton crawler crane, in combination with a 200-ton assisting crawler crane, was selected to be used to erect the dome. (CDUA A-001 page B-9)	Misleading. Incomplete quotation. Section 1.3.1 of Appendix B to the CDUA states: "The pros and cons of each viable option are outlined in Table B-4. Based on the review performed, a 300-ton crawler crane, in combination with a 200-ton assisting crawler-crane, was selected to be used to erect the dome." Ex. A-1, Appx. B at B-9.

FOF/ COL #	Page	FOF/COL	Response
248	27	Crawler Crane is susceptible to tipping during high wind loads. (CDUA A-001 page B-1 0; PDF 233)	Misleading. Presented out of context. In addition to the language quoted for this proposed finding, Section 1.3.1 of Appendix B to the CDUA goes on to state: "the tower crane option does not provide any advantage in terms of wind safety; the tower crane could be considered even less safe than the crawler crane option since it cannot be lowered during strong winds. This is particularly important at Mauna Kea where strong winds are frequently combined with ice storms, which greatly increases both the weight on the crane structure and the wind cross section. The gantry crane option does not provide any advantage over the crawler crane option, and would require a larger area to be disturbed, increasing the Project impacts to the environment. This leaves the crawler crane option as the preferred crane option for construction of the TMT Observatory at the 13N Site." Ex. A-1, Appx. B at B-10.
249	27	High winds are common in the summit region. (CDUA A-001 page 3-16)	Not in dispute.
250	27	Mauna Kea where strong winds are frequently combined with ice storms, which greatly increases both the weight on the crane structure and the wind cross section. (CDUA A-001 page B-10)	Misleading. Presented out of context. See response to FOF/COL#248, above.
251	27	The crawler crane would be transported to the 13N site via transport trailers and assembled on site. (CDUA A-001 page B-11)	Not in dispute.

FOF/ COL #	Page	FOF/COL	Response
252	27	<p>Ground preparations must be made to take the full bearing load of the crane out to the 40-foot width in the specified setup areas. The crawler crane has a pressure on the ground of 3,400 psf with no load. With a 45 ton load (the likely maximum during this project), the pressure on the ground is 5,600 psf. Ground preparations to handle this load can be achieved by (1) preparing the soil, but this may not be possible and will only be known once the geotechnical studies have been completed. (CDUA A-001 page B-11; PDF 234)</p>	<p>Misleading. Incomplete quotation. Excerpt states: "... Ground preparations to handle this load can be achieved by (1) preparing the soil, but this may not be possible and will only be known once the geotechnical studies have been completed, (2) temporary foundations, or (3) crane mats that spread the load further than the track widths." Ex. A-1, Appx. B at B-11 (emphasis added to language left out of proposed FOF/COL#252).</p>

FOE/ COL #	Page	FOF/COL	Response
253	27	<p>The most significant natural hazards are seismic activity and high wind. Hawai'i Island is one of most seismically active areas on Earth, and about two dozen earthquakes with magnitude 6 or greater have been documented on Hawai'i since the devastating earthquakes of 1868. (CDUA Ex A-001 , page 3-16</p>	<p>Misleading. Incomplete quotation. Section 3.10 of Exhibit B to the CDUA, states: "The most significant natural hazards are seismic activity and high wind. Hawai'i Island is one of the most seismically active areas on Earth, and about two dozen earthquakes with magnitude 6 or greater have been documented on Hawai'i since the devastating earthquakes of 1868. Therefore, the Project would comply with applicable seismic safety regulations and standards in the design of structures to meet applicable codes to ensure life safety of personnel and visitors. Also, the design of the Observatory incorporates techniques to minimize the seismic risk of potential damage to the telescope and associated equipment. With these measures, the likelihood of damage is lessened." Ex. A-1, Exhibit B at 3-16 (emphasis added to language left out of FOF/COL#253).</p>

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254	27	Mr. Sander stated "Yes", to direct effect is a potential to affect the stability and the structure integrity of the Manitowoc 2250 crane, while the indirect effects are wind forces causing the load on the hook to move suddenly. 1/4/17 Tr.V.21P.38L.13-17	Incomplete. Misleading. Presented out of context. While recognizing possible risks involved with the use of a large construction crane, Mr. Sanders stated that "[a]ny use of a large crane is something where you have to be very careful and use the best possible safety practices." 01/04/17 at 38:6-8; see also 01/04/17 at 38:9-25. The general contractor for the TMT Project is Goodfellow Brothers, which C. Freitas' own witness, Rosier, testified is a "really good" company. Tr. 2/16/17 at 244:6-9.
255	28	Mr. Sander stated "Correct", to the wind speed doubles. The wind pressure increases four times. 1/4/17Tr.V.21P.40L.12-14	Not in dispute.
256	28	Mr. Sander admitted that it would cause it to collapse and the load to fill with potential disaster consequences. 1/4/17TrV.21P40L.2325.	Mischaracterization. Citation does not support the proposition. In response to question "[w]ould it cause it to collapse and the load to fill with potential disasters consequences," Mr. Sanders stated only that "[t]hat is a risk." He did not "admit". 01/04/17 at 41:21-24. Moreover, citation to record is inaccurate.

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257	28	Mr. Sander admitted that height of the crane between the ground and the wind pressure, the greater the risk. 1/4117 Tr.V.21P41L2-5.	Misleading. Presented out of context. In response to the question “[i]sn’t it true to say that the height of the crane between the ground and the wind pressure, the greater the risk,” Mr. Sanders stated “[t]hat’s correct. But all of these things that you’re asking are part of the operating methods and training of crane operators.” 01/04/17 at 41:2-7.
258	28	Mr. Sander admitted that if the wind coming from an opposite direction and not flowing in the same direction and it sweeps up from the side of the crane, wouldn’t it throw the crane off in the stability of the jib. 1/4/17 Tr.V.21 P.41 L21- 24	Misleading. Presented out of context. In response to the question “if the wind coming from an opposite direction and not flowing in the same direction and it sweeps up from the side of the crane, wouldn’t it throw the crane off in the stability of the jib”, Mr. Sanders responded, “[i]t will affect the stability of the crane. And again, this is part of the standard operating procedures to deal with this.” 01/04/17 at 41:13-19 (emphasis added).
259	28	Cindy stated, This Manitowoc crane has a height of 360 in height. (2-21-17Tr.V.38P.89L17-19; Exhibit S-27)	Incomplete. Misleading. Partial quotation. Ms. Freitas testified that “[t]his Manitowoc crane can stand of a height – depends on what they have up there. But it can exceed to 360 in height.” 02/21/17 at 89:17-19

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260	28	Cindy stated, The crane is not stable from wind that comes from the side view of the crane. (2-21-17Tr.V.38P.90L.5-24; Exhibit S27.)	Not credible. See UH-TIO FOF No. 988. The general contractor for the TMT Project is Goodfellow Brothers, which C. Freitas' own witness, Rosier, testified is a "really good" company. Tr. 2/16/17 at 244:6-9.
261	28	Cindy stated, The Manitowoc crane, can only sustain legally by federal guidelines only 45 miles per hour other than that it is at high risk. (2-21-17Tr.V.38P.91L.9-13; Exhibit S-27)	Not credible. Unsupported/Unsubstantiated. To the extent Ms. Freitas provided a legal opinion, her testimony is without basis as she is not a legal expert. See UH-TIO FOF No. 988
262	28	Cindy stated, High winds load. It can tip and crush anything in sight. including the humans.(2-21-17Tr.Y.38P.91 L.17-19; Exhibit S-27)	Not credible. Based on speculation. See UH-TIO FOF No. 988.
263	28	Cindy stated, so when this things moves in a degree, sometimes with the factor of the snow and the wind, it can tip the crane down from the side. (2-21-17Tr.V.38P.92L.8-10; Exhibit S-27)	Not credible. Based on speculation. See UH-TIO FOF No. 988.
264	28	Cindy stated, Correct. That's why the monitor that Mr. Gary Sanders had mentioned, they will have some kind of monitor to monitor the wind. But that wind sometime comes in clusters that we know of from being up there a long period of time, meaning the will die; and all of a sudden, you get a real gust of wind. (2-21 -17Tr:Y.28P.9SL.12-17	Not credible. Unsupported/Unsubstantiated. Ms. Freitas' opinion regarding wind behavior atop Mauna Kea is without basis as she is not a meteorologist. See UH-TIO FOF No. 988
265	28	Susan stated, The reinforcement that they have on the inside (hydraulic equipment hoses)is susceptible depending on usually, the temperature; as the oil gets hotter, to breaking through the reinforcement and causing a leak because the out side is already ruptured in some fashion (Tr. 2/21/17:V38:P43:L9-14)	Not credible. Based on speculation. See UH-TIO FOF No.813

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266	28	Susan stated, It can be a leak in the engine , which would be a different type of oil, or it can be a leak in the hydraulic pump system , which is another different type of oil, a hydraulic oil . (Tr. 2/21/17:V38:P43:L19-25)	Not credible. Based on speculation. See UH-TIO FOF No. 813
267	29	Susan admitted That at a extreme temperature they would definitely wear out a lot faster or be susceptible to breakage or crack or pinholes that they would at a lower level. (Tr. 2/21/17:V38:P48:L22-25 and P49:L1-3)	Not credible. Based on speculation. See UH-TIO FOF No. 813
268	29	Susan admitted, there is a 5000 gallon diesel tank and 3000 gallon tanks also hydrostatic tank that's inside the facility . They are not free from any kind of hazard, environmental hazard if there was a large earthquake . (Tr. 38:V38:P60:L15-25)	Not credible. Based on speculation. See UH-TIO FOF No. 813
269	29	"It was the nature of place that shaped the cultural and spiritual view of the Hawaiian people . " Cultural Attachment " embodies the tangible and intangible values of a culture-how a people identify with, and personify the environment around them . It is the intimate relationship (developed over generations of experiences) that people of a particular culture feel for the sites, features, phenomena, and natural resources, etc., that surround them-their sense of place . This attachment is deeply rooted in the beliefs, practices, cultural evolution, and identity of a people . (TMT FINAL EIS Volume 2 (May 8, 2010 Exhibit A-3, page 3.2)	Incorrect citation. Excerpt is found at Ex. A-3, Section 3.2 at 3-8.
270	29	"Practices identified as having religious associations include: 1) Recognitions of the summit area as a sacred place and the abode of divinities . 2) Continued worship practices , including the constructing of ahu or leaving of offerings . 3) Umbilical cord deposition (Kanu piko), particularly at Lake Waiau. 4) Scattering of cremation remains . 5) Collecting water from Lake Waiau and snow from the summit area. 6) Calendrical rites carried out at the summit of Kukahau'ula. 7) Practices identified as having economic or subsistence associations include: Traversing the summit region from area of Hawaii'i Island to	Misleading. Presented out of context. No credible evidence was presented to establish that customary and traditional practices occur within the area E location site of the TMT Observatory. See UH-TIO FOF 624 and 627. There is no reliable probative and substantial evidence that his or his referenced practices are

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		<p>another, via the trail system. (CDUA Exhibit A- 1. page 4-5)</p>	<p>within the bundle of rights protected by article XII, section 7 of the Hawaii State Constitution.</p> <p>The two ahu built and installed by the group on the access road in and near Area E in 2015 were placed for political or protest reasons to halt the TMT Project, and not in accordance with any recognized traditional practice performed by W. Freitas at those locations. UH-TIO FOF 732.</p> <p>To the extent that this is being used to argue a religious servitude over Mauna Kea because some native Hawaiians consider the mountain sacred, such a position violates the establishment clause of the state and federal constitutions. See UH-TIO COL 355-382.</p> <p>Not in dispute the certain individuals hold such spiritual and religious beliefs; however, it cannot be generalized as true for all Hawaiian people. The fact that certain individuals may hold and/or express such religious or spiritual beliefs regarding <u>inter alia</u>, the sacredness of Mauna Kea, is again not in dispute, but the legal impact of such beliefs is clearly in dispute. There is no reliable probative and</p>

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271	29	<p>"This attachment to environment bears direct relationship to the beliefs, Practices, cultural evolution, and identity of a people. In Hawai'i cultural attachment is manifest in the very core of Hawaiian spirituality and attachment of landscape. (Master Plan 2000 Exhibit 48, page V -1)</p>	<p>substantial evidence that the substance of the belief is factual.</p>
272	29	<p>Native Hawaiians traditions state that ancestral akua (gods, goddesses, deities) reside within the mountain summit area. These personages are embodied within the Mauna kea landscape and they are believed to be physically manifested in earthly form as various pu'u (hills) and as the waters of Lake Waiau. Because these akua are connected to the Mauna Kea Landscape in Hawaiian genealogies, and because elders and akua are revered and looked to for spiritual guidance in Hawaiian culture, Mauna Kea is considered a sacred place. (TMT Management Plan Exhibit A-23, page 2-1)</p>	<p>See response to proposed finding of fact 270 above.</p> <p>Misleading. Presented out of context. The TMT Observatory is not being built on any pu'u. The closes pu'u to the 5 acre area E site is Pu'u Poliahu, which is 0.78 miles from the site. See Ex. C-18. Lake Waiau is located 1.42 miles from the 5 acre area E site. See <u>id.</u> There is no credible evidence that the building of the TMT Project will have any substantial adverse impact to these locations. Correct citation is Ex. A-23, Exhibit B at 2-1.</p>

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273	30	Belief that the upper mountain region of Mauna kea, from the Saddle area up to the summit, is a sacred landscape as a personification of the spiritual and physical connection between one's ancestors, history, and the heavens. (TMT Management Plan Exhibit A-23, page 2-2)	Misleading. Presented out of context. The fact that some native Hawaiians consider Mauna Kea to be sacred does not act as an absolute bar on development. The fact that certain individuals may hold and/or express such religious or spiritual beliefs is not in dispute, but the legal impact of such beliefs is clearly in dispute. There is no reliable probative and substantial evidence that the substance of the belief is factual. The Board must evaluate the proposed project under the eight criteria. See HAR § 13-5-30(c); see <i>also</i> UH-TIO COL 88-103, 355-382; see <u>also</u> response to proposed finding of fact 208 above.
274	30	Mr. Cruz admitted, Hayes told Cruz that he wanted CSH to conduct interviews with Native Hawaiians who supported the TMT to obtain a "balanced report," but the purpose of a CIA is not to balance a report, rather it is "designed to find impacts." (Tr 2/28/ 17:V42:P109:L10)	Not credible. See UH-TIO FOF No. 203
275	30	Mr. Cruz stated, taking out bits and pieces here and there, but they took out the teeth from the Cultural Impact Assessment ("CIA") that I wrote. (Tr2/28/17:V42:P 11 :L23-25)	Not credible. See UH-TIO FOF No. 203 Citation does not support the proposition. Incorrect citation given; 02/28/17 at 111:23-25 is correct citation.
276	30	Mr. Cruz stated, No conclusion. No recommendations and no teeth, you know. If you work on a project that involves the most sacred site in the Pacific Ocean and there's nothing, no-recommendation. (Tr 2/28/17:V42:P112:L5-8)	Not credible. See UH-TIO FOF No. 203.

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277	30	Mr. Cruz stated, We always do revisions on cultural Impact assessments to meet the basic memo requirements, but never have I been asked to remove recommendations. This is the one and only project. (Tr 2/28/17:V42:P1 05 :L4-7)	Not credible. See UH-TIO FOF No. 203.

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278	30	<p>Mr. Cruz stated, I believe that any agency that is going to make a decision, they need all the information, and by leaving this information out, they could make the wrong decision. (Tr. 2/28/ 17: V42:PI 07:L19-22)</p>	<p>Not credible. See UH-TIO FOF No. 203. Misleading. Presented out of context. Unsupported/Unsubstantiated. Mr. Cruz was initially asked “[i]f the State Historic Preservation Division did not have access to the cultural impact assessment, do you believe that their recommendation might also have been missing some important information” at which point the Hearings Officer stated to Mr. Cruz, “[p]lease do not answer. This witness is not qualified to speak for SHPD.” Mr. Cruz’s subsequent testimony as quoted in this proposed finding, is based on his own conjecture. 02/28/17 at 107:7-22. Moreover, SHPD was consulted throughout the multiple stages of this TMT Project. See e.g., UH-TIO FOF ¶¶216 (SHPD provided comments on the CIA and were also consulted as to which groups and individuals should be contacted); 310 (SHPD recommended the option that was ultimately selected for the placement of the TMT Access Way); 514 (SHPD approved several AISs that were introduced and accepted as evidence in this CCH); and 545 (SHPD determined that Site 21449 was not a historic site)..</p>
279	30	<p>Ms Abad stated, The same degree that these wahi kupuna hold, the degree of impact will-will reverberate throughout our lahui if anything were to destroy it integrity. Tr. 1/19/17: V27:P57:L1 -5)</p>	<p>Not credible. See UH-TIO FOF No. 604</p>

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280	30	<p>Ms. Abad stated, there should have been consultation in identifying sites, identifying the appropriate unit of analysis, identifying the functions of sites or region or districts, identifying the significance levels, the nature of the significance, that nature of potential impact, the degree of potential impact. All of these should have been done in consultation with cultural practitioners, those associated with the site. (Tr. 1/19117:V27:P61 :L2-9)</p>	<p>Not credible. See UH-TIO FOF Nos. 604-608. The credible and substantial evidence presented in this case demonstrates that significant and appropriate consultation occurred with respect to the TMT Project. See e.g., UH-TIO FOF ¶¶210-237.</p>
281	31	<p>Surfaces, Textures and Material, Roofs:, states, "Roof design and material and color selection in conventional structures should merge the facility into the natural landscape. Reflective materials are to be avoided." (Master Plan 2000 Exhibit A- 48, page XI-6; Exhibit A-001 page 7-13.</p>	<p>Misleading. Provided out of context. As explained in the CDUA: "The finish for the TMT Observatory dome will be a reflective aluminum-like finish, similar to that of the Subaru observatory. The use of a reflective aluminum-like finish was based on the following considerations (1) visibility of the dome, (2) optimum performance of the observatory, and (3) reduced need of cooling air within the dome during the day. When considering the visibility of the dome, the aluminum-like exterior finish was selected over white and brown because the aluminum-like finish reflects the colors of the sky and ground, which helps the dome blend into its setting and reduces the visual impact whether the summit is bare or covered in snow." Ex. A-1, Section 7 at 7-9.</p>

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282	31	Heights & Widths: Heights and widths of ridge facility designs should seek to minimize visible heights above existing ground as much as practicable. The following are maximum dimensions established to guide the design of facilities and to regulate the impact of new development. Facilities developed on ridge sites may be developed to a maximum height of approximately 130 feet measured from finished grade, and a maximum width of 130 feet. (Master Plan 2000 Ex. A-48, page XI 5)	Misleading. Presented out of context. Dr. Sanders testified that the TMT's design plan is generally consistent with the 2000 Master Plan: Q: (By Mr. Freitas): In your A packet, A-23, which is the TMT Management Plan, Page 4-23, PDF file 185 states: The TMT has complied with the design guidelines presented in the 2000 Master Plan, and the Master Plan Project. So did TMT's design plan comply with the master plan, is the question? A: Generally, it's consistent with the plan and complies with it. 01/04/17 at 15:7-16
283	31	As the CMP maintains consistency with the 2000 Master Plan, future updates to the plan should be consistent with the CMP. (CMP Ex - A-9 PAGE 2-3)	Not in dispute.
284	31	Mr. Sander states that, " the height of the observatory aboveground is in the 180- 187-foot range, " and that " the deepest part of the foundation is about 21 or 21- and-a-half feet. " 01/4/2017, V. 21 at 56-57:25, 1-5.	Not in dispute.
285	31	Mr. Sander stated we took all of this design guidance or guidelines into account in our design, yes, as well as the Comprehensive Management Plan. 1/3/17 Sanders Tr.V.20P.257L24-25 and P.258L.1-2	Not in dispute.
286	31	Mr. Sanders admitted TMT design plan comply with the master plan, "Generally, it's consistent with the plan and complies with it." 1/4/17 Tr.V.21P.15L.13-15	Not in dispute.

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287	31	Mr. Heen stated that, I suppose one can approve something presented to it without making that document a part of your policy or law, If you adopt it then it becomes a part of your policy, but approving is not the same as adopting. Tr.12/2/17:V11 :P161 :L22-25 and P 162:L 1)	Misleading. Presented out of context. Judge Heen later clarified that “the terms can be used interchangeably also,” explaining that “a board can receive something and say well, we’re approving this. In essence, they’re adopting it. It becomes a part of their official record.” 12/02/16 at 164:3-9
288	31	Annual engine maintenance including changing of engine oil and filters. Refill oil and coolant levels and inspect for leaks, holes and loose connections. CDUA Ex A-001 page D-3) Azimuth Drives: Motor - visual/noise inspection, seals, brake settings. Gearbox - visual/noise inspection, check oil level. Replace items as required. (CDUA Ex A-001 page D-4)	Misleading. Presented out of context. Partial quotation. Citation is incorrect. Appropriate quotation is as follows, indicating that maintenance items are anticipated, but will ultimately depend on manufacturer guidelines: “The Project includes an emergency generator as a backup should the HELCO-supplied power go out. Maintenance of the emergency generator will follow guidelines supplied by the manufacturer of the equipment ultimately acquired and installed. Monitoring is anticipated to include items such as the following . . . Annual engine maintenance including changing of engine oil and filters. Refill oil and coolant levels and inspect for leaks, holes and loose connections.” Ex. A-1, Appx. D at D-2 – D-3. Quote pertaining to Azimuth Drives has to do with the Rotating Dome and Shutter. Ex. A-1, Appx. D at D-4.

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289	31	Shutter Drives: Motor - visual/noise inspection, seals, brake settings. Gearbox visual/ noise inspection, check oil level. Pinion - visual inspection or wear, check bushing functionality. Linear guides - visual inspection, lubrication. Preload spring visual inspection Preload wheel - visual inspection. Replace worn components as required.(CDUA Ex A-001 page D-5)	Misleading. Presented out of context. Quote pertains to maintenance of the Rotating Dome and Shutter. Ex. A-1, Appx. D at D-5.
290	32	Monitor compressor oil and oil cleanliness. Change the oil according to manufacturer's recommendations. Maintain oil level and sample the oil every month. Note compressor lubricant level, color, and pressure. Compare with trended values. Depending on use and compressor size, develop periodic oil sampling to monitor moisture, particulate levels, and other contamination. Replace oil as required. (CDUA Ex A-001 page D)	Misleading. Presented out of context. Citation is incorrect. Appropriate quotation is as follows, indicating that this item is anticipated maintenance but that maintenance will ultimately depend on manufacturer guidelines: "The Project includes a compressed air system. Maintenance of this system will follow guidelines supplied by the manufacturer of the equipment ultimately acquired and installed. It is anticipated maintenance will include the following Monitor compressor oil and oil cleanliness. Change the oil according to manufacturer's recommendations. Maintain oil level and sample the oil every month. Note compressor lubricant level, color, and pressure. Compare with trended values. Depending on use and compressor size, develop periodic oil sampling to monitor moisture, particulate levels, and other contamination. Replace oil as required." Ex. A-1, Appx. D at D-8.

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291	32	<p>Cap Bogies: Check gas pressure and adjust, gas spring visual inspection. Bearings - visual inspection, check noise/vibration & lubricate. Bushings (at pivots) - check smoothness/tightness. Wheels - visual inspection of wear. Motor - visual/noise inspection, seals, brake settings. Gearbox - visual/noise inspection, check oil level. (CDUA Ex A-001 page D-4)</p> <p>Nanci stated that Tomas Brand of the Environmental Protection Agency was notified on June 9, 2015 and did not take any action. (2-16-17, Tr. V 37 P. 180 L. 7)</p>	<p>Misleading. Presented out of context. Quote pertains to maintenance of Rotating Dome and Shutter. Ex. A-1, Appx. D at D-4.</p>
292	32	<p>Nanci stated that Tomas Brand of the Environmental Protection Agency was notified on June 9, 2015 and did not take any action. (2-16-17, Tr. V 37 P. 180 L. 7)</p>	<p>Citation does not support the proposition. Mischaracterization. Unsupported/Unsubstantiated. Citation is incomplete. Ms. Munroe testified that she spoke to Mr. Brand and that "[t]hat's the last contact I had with him." Her testimony does not indicate, nor could she say, based on her limited contact with Mr. Brand, that he "did not take any action." 02/16/17 at 179:13 - 180:7.</p>
293	32	<p>Nanci stated that the Board of Land and Natural Resources in Honolulu was notified at a meeting on June 12, 2015 and did not take any action. (2-16-17, Tr. V.37P.180,L.10-12;2-16-17,Tr.V.37P. 186,L.17)</p>	<p>Mischaracterization. Unsupported/Unsubstantiated. Ms. Munroe testified that there was no follow-up by the BLNR. She had no basis to say, nor does her testimony state that the BLNR "did not take any action." 02/16/17 at 180:8-10.</p>
294	32	<p>Nanci made a complaint to the Department of Land and Natural Resources in an email to a generic address from their website dated August 4, 2015. (2-16-17,Tr.V.37,P.180,Line14-16)</p>	<p>Mischaracterization. Ms. Munroe could not recall with certainty who she sent the email to, only that she thought it was a "general email for comments and complaints, not a specific party". Moreover, she testified that the copy of the email presented to her only contained "the 'from' portion." 02/16/17 at 180:11-25</p>

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295	32	Nanci notified the Ranger Bruce Heidenfeldt. (2-16-17, Tr. V.37, P.187, L. 4; 2-16-17, Tr. V.37P.182, L.5-15)	Irrelevant/Inapplicable.
296	32	Mr. Sanders stated that he was aware of the oil leaks in 2015 . 1/3/17 Tr.V.20P.23L.2	Mischaracterization. The question to Dr. Sanders was “[w]ere you aware of any concerns raised about alleged oil leaks originating from that construction equipment . . .” Dr. Sanders answered “[y]es. I learned about those from various reports including social media.” 01/03/17 at 23:22 – 24:1. His testimony was therefore not that he was aware of any leaks themselves, only that he was aware of “concerns raised about alleged oil leaks.” More importantly, Dr. Sanders testified that all of the alleged leaks – he said it could have been moisture - were addressed appropriately. See UH-TIO FOF ¶815.
297	32	Nanci stated that the Private security was aware. (2-16-16, TrV.37P183L. 8-26)	Citation does not support the proposition. Mischaracterization. Unsupported/Unsubstantiated. Ms. Munroe’s testimony indicates that she had no specific information about the activities of the “private security.” The proposed finding as to what the “private security” was aware of is pure speculation. 02/16/17 at 182:5 – 184:1

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298	32	Nanci testified that attempts were made to obliterate some oil. (2-16-17Tr.V.37P.182L.16-17)	<p>Citation does not support the proposition. Mischaracterization.</p> <p>Unsupported/Unsubstantiated. Ms. Munroe testified that "the two largest oil spills on the loop road just at the top of the TMT access road had been kicked over and sort of ground into the gravel as someone apparently had attempted to somehow disperse what those oil spills, you know, originally looked like. It looked like they had gravel and dirt kicked over them." Ms. Munroe's speculation as to what may have happened is not a basis for concluding that "attempts were made to obliterate some oil." 02/16/17 at 182:9-15.</p> <p>Moreover, Ms. Munroe testified that she never tested the sample she took of the alleged oil spills. She also testified that the oil spill were not located on the TMT Project site. See UH-TIO FOF ¶973.</p>
299	32	Nanci stated she didn't get the impression that some one observed it but kicked it or scuffed it with their feet. (Tr2/16/ 17:V37:P206:L11-13)	<p>Inaccurate/False. Does not accurately represent Ms. Munroe's testimony, which was that "I didn't get the impression when I observed it that anybody had poured anything but more like kicked it, you know, scuffed it with their feet." 02/16/17 at 206:11-13. Ms. Munroe's testimony is also speculative.</p>

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300	33	Nanci state that no official clean up attempt was observed. (2-16-17Tr.V.37P.182L.24 and L.21)	Mischaracterization. Unsupported/Unsubstantiated. While Ms. Munroe testified that "there was no oil spill response . . . by anyone of the Board of Land and Natural Resource or the Office of Mauna Kea Management," her testimony is speculative. 02/16/17 at 182:16-21. Dr. Sanders testified that all of the alleged leaks – he said it could have been moisture - were addressed appropriately. See UH-TIO FOF ¶815.
301	33	Nanci stated she was on the TMT access road bulldozer site. (2-16-17Tr.V.37P.208L.15; Exhibit S-10)	Irrelevant/Inapplicable. Incomplete. Does not specify a time frame or provide more precise location information.
302	33	Nanci testified there were other witnesses who inspected the TMT access Road site for oil spills. (2-16-17Tr. V .3 7P .21 OL.6-9)	Irrelevant/Inapplicable. Ms. Munroe did not identify said witnesses in her testimony and there is no indication that any of them were called to testify.
303	33	Nanci stated that she and others would check for fluid leaking and any movement of equipment. (2-16-17Tr. V .37P .21 1.6-1 0)	Not credible. See UH-TIO FOF No. 973
304	33	Nanci stated that Glover uses waterproof liner under equipment and is parked on it that holds it down. (2-16-17Tr.V.37P.217L.6-11)	Not credible. See UH-TIO FOF No. 974
305	33	Susan stated, And in the process they found out that partway down the hole, there was this 4-inch layer of oil that was spilled sometime 20 years ago before. (Tr.2/21/17: V38:P38:L10-13)	Irrelevant/Inapplicable. Misleading. Presented out of context. Based on speculation. Ms. Rostier's testimony on this topic pertained to the Caltech Submillimeter Telescope and a leak which occurred at that site. 02/21/17 at 32:22 – 38:16

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306	33	Susan stated, 35000 pounds of the backfill material and 1000 pounds of spent absorbent material from the CSO. (Tr. 2/21/17:V38:P38:L19-20)	Irrelevant/Inapplicable. Misleading. Presented out of context. Ms. Rosier's testimony on this topic pertained to the Caltech Submillimeter Telescope and a leak which occurred at that site. 02/21/17 at 32:22 – 38:24
307	33	Susan admitted that, in Ex S-18d the "cleanup for the rest of the material would be deferred until decommissioning in 2016". And CSO has not been decommissioned. (Tr 2/21 /17:V38:P39:L7-11)	Irrelevant/Inapplicable. Misleading. Presented out of context. Ms. Rosier's testimony on this topic pertained to the Caltech Submillimeter Telescope and a leak which occurred at that site. 02/21/17 at 32:22 – 39:11
308	33	Susan stated, February 21, 2017, a year later. (Tr 2/21/17:V38:P39:L13)	Irrelevant/Inapplicable. Misleading. Presented out of context. Ms. Rosier's testimony on this topic pertained to the Caltech Submillimeter Telescope and a leak which occurred at that site. 02/21/17 at 32:22 – 39:13
309	33	Susan admitted that common spills were the Number 1 thing that I ran to get part for, for broken hoses, and hoses are so complicated. (Tr 2/21/17:V38:P39:L 18-21)	Irrelevant/Inapplicable. Not credible. Misleading. Partial quotation.
310	33	Susan admitted, when equipment is not in operation are they expected to leak, more so, because the oil would be under pressure. (Tr 2/21/17:V38:P44:L6-10)	Irrelevant/Inapplicable. Not credible. Incomplete. Misleading. Partial quotation.
311	33	Susan admitted there is an employee called an oiler, who check the fluid levels and look for leaks, they only in the morning before the operator arrives. The oiler is not there to monitor all day. (Tr 2/21/17:V38:P45:L21-25 and P46:L1-4)	Irrelevant/Inapplicable. Not credible. Unsupported/Unsubstantiated. Ms. Rosier cannot speak to what practices will be during construction of the Project.

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312	33	Susan admitted that attitude towards oil on Mauna Kea makes no difference to them, I'm HOPING my testimony helps make a difference, 1 really am. (Tr2/21 /17:V38:P51 :L21 -25)	Irrelevant/Inapplicable. Unsupported/Unsubstantiated. Misleading. Presented out of context. Line of questions pertained to general practices regarding oil historically over an unspecified period, presumably in Hawaii in general. Ms. Rosier's testimony lacks foundation and is of no relevance to this matter inasmuch as it is vague, nonspecific and without basis. 02/21/17 at 51:11 – 52:4. Not credible. See UH-TIO FOF No. 977
313	33	Susan admitted that, when oil freezes it's a concern, the interior reinforcement is getting the brunt of the expansion/contraction from the heat elements, and kind of doing the same. It goes from thin to thick. (Tr2/21117:V38:P50:L6-13)	Unsupported/Unsubstantiated. Ms. Rosier's testimony was based on speculation. Not credible. See UH-TIO FOF No. 977
314	34	Susan admitted that, no job has been free of oil spills, no lines breaking, or not spillage of these fluids. (Tr 2/21/17:V38:P59:L10-14)	Irrelevant/Inapplicable. Not credible. Misrepresentation. Ms. Rosier did not testify that "no job has been free of oil spills . . ." (emphasis added). Her testimony was limited to her own personal experience. 02/21/17 at 59:10-14.
315	34	Susan stated. Yes. It could also blow a seal and have oil come out of the hydraulic cylinder itself. (Tr2/17/17:V38:P61:L9-10)	Unsupported/Unsubstantiated. Ms. Rosier's testimony was based on speculation. Not credible. See UH-TIO FOF No. 977

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316	34	Susan admitted that none of the excavations are free from environmental hazard. (Tr2/17/17:V38:P61 :L22-24)	Misrepresentation. Ms. Rosier's testimony does not support this general statement. The question to Ms. Rosier was "[s]o none of these types of excavations are free from environmental hazard?" Ms. Rosier answered within the parameters of her own experience, "[n]ot that I have seen." 02/21/17 at 61:22-24. Not credible. See UH-TIO FOF No. 977
317	34	Susan stated the hydrostatic oil doesn't have those warning sheet that the government put out. It has one but it has not been assessed yet for its viscosity is flexible. Sincerely a huge problem. (2-16-17Tr.V.37P.246L.10-25 and P.246L.1 -3; Exhibit S-18e)	Misleading. Partial quotation. Ms. Rosier stated with regard to hydrostatic oil, that it "doesn't have, you know, those warnings sheets that the government puts out. It has one, but it doesn't - - it says not - - it hasn't been assessed yet for everything and its viscosity is flexible. Its kind of like in a car you can have 30 weight oil is what your engine requires, but you can have 10W-30. So it can fluctuate between 10 weight and 30 weight and that's what the new hydrostatic oils are. So I think that's their attempt to solve that problem because that is a - - sincerely huge problem for them up there at that altitude and everything." 02/16/17 at 246:15 - 247:3. Not credible. See UH-TIO FOF No. 977

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I	34	<p>I. PRELIMINARY ISSUES</p> <p>A. Motions to Disqualify Hearing Officer</p> <p>B. The Scheduling of Pre-Hearing Conference in Honolulu</p> <p>C. The Scheduling of Contested Case Hearings</p>	Irrelevant/Inapplicable. Unsupported/Unsubstantiated. Lists "issues"; is not a conclusion of law.
II.A.2	34	<p>The Conservation District rules state that "[t]he applicant shall have the burden of demonstrating that a proposed land use is consistent with" the criteria set forth in HAR § 13-5-30(c). As the party proposing a land use in the Conservation District, UH/UHH is clearly the "applicant" in this matter.</p> <p>Therefore, the burden of proof rests decisively upon the Applicant to prove that it meets the requirements for the granting of the CDUA. The degree of proofs a preponderance of the evidence. HAR § 13-5-30(c); HRS § 91- 10(5).</p>	Incomplete. See UH-TIO COL Nos. 78-83. The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL.
II.B.1.	34	<p>Preamble of the Hawai'i State Constitution states:</p> <p>We, the people of Hawaii, grateful for Divine Guidance, and mindful of our Hawaiian heritage and uniqueness as an island State, dedicate our efforts to fulfill the philosophy decreed by the Hawaii State motto, "<i>Ua mau ke ea o ka aina i ka pono.</i>"</p> <p>and culture, and to preserve the quality of life that we desire.</p> <p>We reaffirm our belief in a government of the people, by the people and for the people, and with an understanding and compassionate heart toward all the peoples of the earth. do hereby ordain and establish this constitution for the State of Hawaii.</p>	Incomplete. Second paragraph of quote should state: " We reserve the right to control of our destiny, to nurture the integrity of our people and culture, and to preserve the quality of life that we desire." (emphasis added to missing text). The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL.
II.B.2	35	<p>Article I, Section 4, of the Hawai'i State Constitution states:</p> <p>No law shall be enacted respecting an establishment of religion, or prohibiting the free exercise thereof, or abridging the freedom of speech or of the press or the right of the people peaceably to assemble and to petition the government for a redress of grievances.</p>	The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL.

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II.B.3	35	<p>Article I. Section 5, of the Hawai'i State Constitution states: No person shall be deprived of life, liberty or property without due process of law, nor be denied the equal protection of the laws. nor be denied the enjoyment of the person's civil rights or be discriminated against in the exercise thereof because of race, religion, sex or ancestry.</p>	<p>The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL.</p>
II.B.4	35	<p>Article XI Section 1, of the Hawai'i State Constitution states: For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawaii's natural beauty and all natural resources, including land, water, air, minerals and energy sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State. All public natural resources are held in trust by the State for the benefit of the people.</p>	<p>UHH/TIO dispute that the Public Trust Doctrine applies to the TMT Project. Nevertheless, even if it does apply, the TMT Project complies with the Public Trust Doctrine. See UH-TIO FOF ¶¶1001-1009; UH-TIO COL ¶¶295-323.</p>
II.B.5	35	<p>Article XI. Section 7, of the Hawai'i State Constitution states: The State has an-obligation to protect, control and regulate the use of Hawaii's water resources for the benefit of its people. The legislature shall provide for a water resources agency which, as provided by law, shall set overall water conservation, quality and use policies; define beneficial and reasonable uses; protect ground and surface water resources, watersheds and natural stream environments; establish criteria for water use priorities while assuring appurtenant rights and existing correlative and riparian uses and establish procedures for regulating all uses of Hawaii's water resources.</p>	<p>The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL. No credible evidence was presented to show that the TMT Project will impact any of the hydrologic resources on Mauna Kea. See UHH-TIO FOF ¶¶796-823. The Petitioners and Opposing Intervenor did not submit any credible evidence to rebut Tom Nance's expert opinions. Mr. Nance has substantial education and experience in the field of hydrology and water resources. Reliable, probative, substantial, and credible evidence supports Nance's scientific opinions. See <u>id</u></p>

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II.B.6	35- 36	<p>Article XI Section 9, of the Hawai'i State Constitution states: Each person has the right to a clean and healthful environment, as defined by laws relating to environmental quality, including control of pollution and conservation, protection and enhancement of natural resources. Any person may enforce this right against any party, public or private, through appropriate legal proceedings, subject to reasonable limitations and regulation as provided by law.</p>	<p>The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL.</p>
II.B.7	36	<p>Article XII, Section 4, of the Hawai'i State Constitution states: The lands granted to the State of Hawaii by Section 5(b) of the Admission Act and pursuant to Article XVI, Section 7, of the State Constitution. Excluding therefrom lands defined as "available lands" by Section 203 of the Hawaiian Homes Commission Act, 1920, as amended, shall be held by the State as a public trust for native Hawaiians and the general public.</p>	<p>The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL.</p>
II.B.8	36	<p>Article XII, Section 7, of the Hawai'i State Constitution states: The State reaffirms and shall protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by ahupua'a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778, subject to the right of the State to regulate such rights.</p>	<p>The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL.</p>

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II.B.9	36- 37	<p>Article XIV. of the Hawai'i State Constitution states: The people of Hawaii believe that public officers and employees must exhibit the highest standards of ethical conduct and that these standards come from the personal integrity of each individual in government. To keep faith with this belief, the legislature, each political subdivision and the constitutional convention shall adopt a code of ethics which shall apply to appointed and elected officers and employees of the State or the political subdivision. respectively, including members of the boards, commissions and other bodies.</p> <p>Each code of ethics shall be administered by a separate ethics commission, except the code of ethics adopted by the constitutional convention which shall be administered by the state ethics commission. The members of ethics commissions shall be prohibited. from taking an active part in. political management or in political campaigns. Ethics commissioners shall be selected in a manner which assures their independence and impartiality.</p> <p>Each code of ethics shall include, but not be limited to, provisions on gifts, confidential information, use of position, contracts with government agencies, post-employment, financial disclosure and lobbyist registration and restriction. The financial disclosure provisions shall require all elected officers, all candidates for elective office and such appointed officers and employees as provided by law to make public financial disclosures. Other public officials having significant discretionary or fiscal powers as provided by law shall make confidential financial disclosures. All financial disclosure statements shall include, but not be limited to, sources and amounts of income, business ownership, officer and director positions, ownership of real property, debts, creditor interests in insolvent businesses and the names of persons represented before government agencies.</p>	The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL.

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II.B.10	37	<p>Article XVI Section 7, of the Hawai'i State Constitution provides: Any trust provisions which the Congress shall impose, upon the admission of this State, in respect of the lands patented to the State by the United States or the proceeds and income therefrom, shall be complied with by appropriate legislation. Such legislation shall not diminish or limit the benefits of native Hawaiians under Section 4 of Article XII.</p>	<p>The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL.</p>
II.B.11	37	<p>Amendment I of the U.S. Constitution provides: Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.</p>	<p>The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL.</p>
II.B.12	37	<p>Amendment XIV, Section 1, of the U.S. Constitution provides: All persons born or naturalized in the United States and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.</p>	<p>The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL.</p>
II.C.13	37	<p>Mauna Kea Anaina Hou v. Board of Land and Natural Resources, ("BLNR"), 136 Hawaii 376, 363 P. 3d 224 (2015). For the foregoing reasons, this court vacates the circuit court's May 5, 2014 Decision and order Affirming Board of Land and Natural Resources, State of Hawaii's Finding of Fact, Conclusions of Law and Decision and Order Granting Conservation District Use Permit for the Thirty Meter Telescope at the Mauna Kea Science Reserve Dated April 12, 2013, and final judgment thereon. This matter is remanded to the circuit court to further remand to BLNR for proceedings consistent with this opinion, so that a contested case hearing can be conducted before the Board or a new hearing officer, or for other proceedings consistent with <i>this</i> opinion.</p>	<p>The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL.</p>

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II.C.14	38	<p>In Public Access Shoreline Hawai'i v. Hawaii County Planning Commission, 79 Hawai'i 425, 903 P.2nd 1246 (1995), (hereafter "PASH"), the Hawai'i Supreme Court stated:</p> <p>i. The State's power to regulate the exercise of customarily and traditionally exercised Hawaiian Rights, necessarily allows the State to permit development that interferes with such rights in certain circumstances ... Nevertheless, the State is obligated to protect the reasonable exercise of customary and traditionally exercised rights of Hawaiians to the extent feasible.</p>	<p>The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL.</p>

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II.C.15	38	<p>In Ka pa'akai O Ka 'Aina v. Land Use Commission (hereafter "Ka Pa'akai v. LUC"), 94 Hawai'i 31, 47,7 P.3d 1068. 1068 (2000) the Hawai'i Supreme Courts states:</p> <p>ii. To preserve and protect traditional and customary native Hawaiian rights, the Board examines the following factors: The identity and scope of cultural, historical, and natural resources in the application area, including the extent to which traditional and customary native rights are to have been exercised in the application area; The extent to which those resources, including traditional and customary native Hawaiian rights, will be affected or impaired by the proposed action; and The feasible action, if any to be taken to reasonably protect native Hawaiian rights if they are found to exist.</p> <p>Ka Pa'akai v. LUC further states:</p> <p>iii. Equally important, the Land Use Commission ("LUC") made no specific findings or conclusions regarding the effects on or the impairment of any Article XII, section 7 [Hawai'i State Constitution] uses, or the feasibility of the protection for those rules. Instead, as mentioned, the LUC delegated unqualified authority to Ka'upulehu development ("KD") ...</p> <p>This wholesale delegation of responsibility for the preservation and protection of native Hawaiian rights to KD, a private entity, however, was improper and misses the point ...</p>	<p>The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL.</p>

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II.C.16	38- 39	<p>In the 1992 case of <i>Pele Defense Fund v. Paty</i>, the Hawaii Supreme Court rendered a landmark decision which broadly held that native Hawaiian rights protected by article XII, section 7 of the Hawaii Constitution "may extend beyond the <i>ahupua'a</i> in which a native Hawaiian resides where such rights have been customarily and traditionally exercised in this manner." This controversial decision abolished over 100 years of Hawaii Supreme Court precedent which restricted native tenant gathering rights to the <i>ahupua'a</i> of residency. The <i>ahupua'a</i> residency requirement had been judicially imposed since at least 1858 in <i>Oni v. Meek</i>, and reaffirmed as recently as 1982 in the case of <i>Kalipi v. Hawaiian Trust Co.</i> Further, the <i>Oni</i> and <i>Kalipi</i> decisions were predicated upon the Kuleana Act of 1850 and its modern day successor, Hawaii Revised Statutes section 7-1. Both sources likewise limit the practice of customary and traditional rights to tenants residing within the <i>ahupua'a</i> in which they seek to exercise the rights.</p>	<p>The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL.</p>
II.C.17	39	<p>In <i>Re Water Use Permit Applications</i>, 94 Hawai'i 97, 9 P.3d 409 (2000) ("the Waiahole Ditch Case"), the Hawaii Supreme Court recognized that public trust doctrine was "a fundamental principle of constitutional law in Hawai'i." Haw. Const., Art.XI, section 1. P.133. 9 P.3d at 444.</p>	<p>UHH/TIO dispute that the Public Trust Doctrine applies to the TMT Project. Nevertheless, even if it does apply, the TMT Project complies with the Public Trust Doctrine. See UH-TIO FOF ¶¶1001-1009; UH-TIO COL ¶¶295-323</p>

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II.C.18	39	<p>In re Water Use Permit Applications "Waiahole I", 94 Hawai'i 97, 9 P.3d 409, (2000). In reviewing Hui/MTF's and OHA's points of error, the court concludes that the Commission on Water Resource Management erred in several respects. First, in considering the effect of the IIFS on native Hawaiian practices in Na Wai 'Eha, the Commission failed to enter findings of fact and conclusions of law regarding the effect of the amended TFFS on traditional and customary native Hawaiian practices in Na Wai #Eha, and regarding the feasibility of protecting any affected practices. Second, the Commission's analysis of instream uses was incomplete, as it focused on amphidromous species and did not fully consider other instream uses to which witnesses testified during the hearings. Third, the Commission erred in its consideration of alternative water sources and in its calculation of diverting parties' acreage and reasonable system losses. The court must vacate the Commission's June 10, 2010 Findings of Fact, Conclusions of Law, Decision and Order, and remand the case for further proceedings.</p>	<p>UHH/TIO dispute that the Public Trust Doctrine applies to the TMT Project. Nevertheless, even if it does apply, the TMT Project complies with the Public Trust Doctrine. See UH-TIO FOF ¶¶1001-1009; UH-TIO COL ¶¶295-323</p>
II.D.19.a	39	<p>County of Hawai'i General Plan Division 3 Construction Documents 1. Section 5-25 Construction documents required. Structures of R-3 or U occupancies that are three or more stories in height.</p>	<p>Irrelevant/Inapplicable. The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL</p>
II.D.19.b	40	<p>State Land use District Boundary Amendment Procedures Chapter 28 I. Section 28-2 Scope and applicability The County council by ordinance may amend the districting of such lands fifteen acres or less located in the State land use urban, rural, and agricultural districts. This Chapter, however, does not apply to those lands situated within the State land use conservation district classification.</p>	<p>Irrelevant/Inapplicable. The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL</p>

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II.D.19.c	40	Building and grading rules: There is no record of any permit for grading on 44- 562 Mauna Kea Access Road around 2012 on the County of Hawaii Real Property Tax Office	Irrelevant/Inapplicable. Not in evidence. Unsupported/Unsubstantiated.
II.D.19.a	40	HRS Chapter 205. State Land Use Law outlines the establishment and purpose of the classification of the four major land use districts in which all lands in the State shall be placed. The conservation district is the most restrictive and is defined to include: areas necessary for protecting watersheds and water sources; preserving scenic and historic areas; providing park lands, wilderness, and beach reserves; conserving indigenous or endemic plants, fish and wildlife, including those which are threatened or endangered; preventing floods and soil erosion; forestry; open space areas whose existing openness. Natural condition or present state of use, if retained, would enhance the present or potential value of abutting or surrounding communities, or would maintain or enhance the conservation of natural or scenic resources; areas of value for recreational purposes; other related activities; and other permitted uses not detrimental to a multiple use conservation concept.	The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL. Incomplete. Missing citation. See UH-TIO COL No. 88.
II.D.19.b	40	HRS Chapter 183C, Conservation District outlines the administration of public lands within the conservation district and articulates this public policy: The legislature finds that lands within the state land use conservation district contain important natural resources essential to the preservation of the State's 'fragile natural ecosystems and the sustainability of the State's water supply. It is therefore, the intent of the legislature to conserve, protect, and preserve the important natural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety and welfare.	The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL Incomplete. Missing citation. See UH-TIO COL No. 89.

FOF/ COL #	Page	FOF/COL	Response
II.D.19.c	41	<p>HRS § 183C-3 outlines the powers and duties of BLNR and DLNR in the administration of public lands within the conservation district. Relevant parts of this statute are listed below:</p> <p>(3) Adopt rules, in compliance with chapter 91 which shall have the force and effect of law;</p> <p>(4) Set, charge, and collect reasonable fees in an amount sufficient to defray the cost of processing applications for zoning, use, and subdivision of conservation lands;</p> <p>(5) Establish categories of uses or activities on conservation lands, including allowable uses or activities for which no permit shall be required;</p> <p>(6) Establish restrictions, requirements, and conditions consistent with the standards set forth in this chapter on the use of conservation lands; and</p> <p>(7) Establish and enforce land use regulations on conservation district lands including the collection of fines for violations of land use and terms and conditions of permits issued by the department.</p>	<p>The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL</p>

FOF/ COL #	Page	FOF/COL	Response
II.D.19.d	41	<p>HRS § 183C-6 outlines DLNR's duties pertaining to permits and site plans for land use in the conservation district. Relevant parts of this statute are listed below:</p> <p>(a) The department shall regulate land use in the conservation district by the issuance of permits.</p> <p>(c) The department shall hold a public hearing in every case involving the proposed use of land for commercial purposes, at which hearing interested persons shall be afforded a reasonable opportunity to be heard. Public notice of the time and place of the hearing shall be given at least once statewide and in the county in which the property is located. The notice shall be given not less than twenty days prior to the date set for the hearing. The hearing shall be held in the county in which the land is located and may be delegated to an agent or representative of the board as may otherwise be provided by law and in accordance with rules adopted by the board. For the purposes of its public hearing or hearings, the department shall have the power to summon witnesses, administer oaths, and require the giving of testimony. As used in this subsection, the term "commercial purposes" shall not include the use of land for utility purposes.</p> <p>(d) The department shall regulate the construction, reconstruction, demolition, or alteration of any structure, building, or facility by the issuance of site plan approvals.</p>	<p>The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL</p>
II.D.19.e	41- 42	<p>HRS Chapter 205A, Coastal Zone Management addresses issues from an integrated ecosystem perspective and all lands of the State are considered to be in the coastal zone management area. The objectives and policies of the coastal zone management program relate to recreational resources, historic resources, scenic and open space resources, coastal ecosystems, economic uses, coastal hazards, managing development, public participation, beach protection and marine resources. HRS § 205A-2.</p>	<p>Incomplete. Misleading. Presented out of context. See UH-TIO FOF Nos. 417 – 421. The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL</p>

FOF/ COL #	Page	FOF/COL	Response
II.D.19.f	42	<p>HRS § 205A-2 outlines the objectives and policies of the coastal zone management program. Relevant parts of this statute are listed below:</p> <ul style="list-style-type: none"> (a) The objectives and policies in this section shall apply to all parts of this chapter. (b) Objectives. (2) Historic resources; <ul style="list-style-type: none"> (A) Protect, preserve, and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture. (3) Scenic and open space resources; <ul style="list-style-type: none"> (A) Protect, preserve, and, where desirable, restore or improve the quality of coastal scenic and open space resources. (c) Policies. <ul style="list-style-type: none"> (2) Historic resources; <ul style="list-style-type: none"> (A) Identify and analyze significant archaeological resources; (B) Maximize information retention through preservation of remains and artifacts or salvage operations; and (C) Support state goals for protection, restoration, interpretation, and display of historic resources. (3) Scenic and open space resources; <ul style="list-style-type: none"> (A) Identify valued scenic resources in the coastal zone management area; (B) Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline; 	<p>Incomplete. Misleading. Presented out of context. See UH-TIO FOF Nos. 417 – 421. The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL</p>

FOF/ COL #	Page	FOF/COL	Response
II.D.19.g	42	<p>HRS § 205A-5 articulates that all agencies shall be in compliance with this chapter.</p> <p>(a) All agencies shall ensure that their rules comply with the objectives and policies of this chapter and any guidelines enacted by the legislature.</p> <p>(b) All agencies shall enforce the objectives and policies of this chapter and any rules adopted pursuant to this chapter.</p>	<p>Incomplete. Misleading. Presented out of context. See UH-TIO FOF Nos. 417 – 421. The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL</p>
II.D.19.h	42- 43	<p>HRS Chapter 226. Hawaii State Planning Act provides guidance for all state agencies to set forth the Hawaii state plan that shall serve as a guide for the future long-range development of the State; identify the goals, objectives, policies, and priorities for the State".</p>	<p>Incomplete. Misleading. Presented out of context. The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL</p>
II.D.19.i	43	<p>HRS § 226-12 outlines the Hawaii State Planning Act's objective and policies for the physical environment--scenic, natural beauty, and historic resources.</p> <p>(a) Planning for the State's physical environment shall be directed towards achievement of the objective of enhancement of Hawaii's scenic assets, natural beauty and multi-cultural/historical resources.</p> <p>(b) To achieve the scenic, natural beauty, and historic resources objective, it shall be the policy of this State to:</p> <ol style="list-style-type: none"> (1) Promote the preservation and restoration of significant natural and historic resources. (2) Provide incentives to maintain and enhance historic, cultural, and scenic amenities. (3) Promote the preservation of views and vistas to enhance the visual and aesthetic enjoyment of mountains, ocean, scenic landscapes, and other natural features. (4) Protect those special areas, structures, and elements that are an integral and functional part of Hawaii's ethnic and cultural heritage. (5) Encourage the design of developments and activities that complement the natural beauty of the islands. 	<p>The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL</p>

FOF/ COL #	Page	FOF/COL	Response
II.D.19.j	43	<p>HAR Title 13. Chapter 5. Conservation District regulates "land use in the conserving district for the purpose of conserving, protecting, and preserving the important natural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety, and welfare." HAR § 13-5-1.</p> <p>BLNR amended its administrative rules, Chapter 5 HAR, relating to the Conservation District on August 12. 20 11. HAR § 13-5.</p>	<p>Incomplete. See UH-TIO COL No. 89. The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL</p>
II.D.19.k	43	<p>HAR § 13-5-30 Permits, stipulates that "Land uses requiring comprehensive review by the board are processed as board permits, management plans, or comprehensive management plans, and temporary variances. Departmental permits and emergency permits are processed by the department and approved by the chairperson. Site plans are processed by the department and approved by the chairperson or a designated representative. If there is any question regarding the type of permit required for a land use, an applicant may write to the department to seek a determination on the type of permit needed for a particular action." HAR § 13-5-30.</p>	<p>The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL</p>

FOF/ COL #	Page	FOF/COL	Response
II.D.19.1	43-44	<p>HAR § 13-5-30(c) stipulates that when evaluating the merits of a proposed land use, the department or board shall apply the following eight criteria:</p> <ol style="list-style-type: none"> (1) The proposed land use is consistent with the purpose of the conservation district; (2) The proposed land use is consistent with the objectives of the subzone of the land on which the use will occur; (3) The proposed land use complies with provisions and guidelines contained in chapter 205A, HRS, entitled "Coastal Zone Management", where applicable; (4) The proposed land use will not cause substantial adverse impact to existing natural resources within the surrounding area, community, or region; (5) The proposed land use, including buildings, structures, and facilities, shall be compatible with the locality and surrounding areas, appropriate to the physical conditions and capabilities of the specific parcel or parcels; (6) The existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, whichever is applicable; (7) Subdivision of land will not be utilized to increase the intensity of land uses in the conservation district; and (8) The proposed land use will not be materially detrimental to the public health, safety, and welfare. 	The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL
II.D.19.m	44	<p>HAR § 13-5-24 identifies land uses in the resource subzone and stipulates that identified land uses beginning with letter (D) such as R-3 Astronomy Facilities require a board permit and a management plan. (D-1) Astronomy facilities under a management plan approved simultaneously with the permit, is also required. HAR § 13-5-24.</p>	The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL

FOF/ COL #	Page	FOF/COL	Response
II.D.19.n	44	<p>HAR § 13-5-39 Management plan approvals, stipulates:</p> <p>(a) Where required, management plans shall be submitted with the board permit application and shall include the requirements listed in Exhibit 3, entitled "Management Plan Requirements: August 12, 2011", which is located at the end of this chapter and made a part of this section.</p> <p>(b) The department or board may require the preparation of a comprehensive management plan where it finds that further development may lead to significant natural, cultural, or ecological impacts within the conservation district. The geographic area, specific resources to be protected and conserved, and other content of a comprehensive management plan shall be determined by the department or board.</p> <p>(c) An annual report to the department is required which shall include the status of compliance of the permit conditions and the implementation of land uses pursuant to the approved management plan schedule.</p>	The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL

FOF/ COL #	Page	FOF/COL	Response
II.D.19.o	45	<p>Chapter 13-5, Exhibit 3 outlines Management Plan Requirements: August 12, 2011.</p> <ol style="list-style-type: none"> 1 General description of the proposed use (e.g. . forestry. fishpond, astronomy, aquaculture, agriculture). 2 Project location (e.g. . island map, location map. site plan (drawn 1:0 scale). 3 Natural resource assessment including descriptive information about the natural resources in the project vicinity such as biological, archaeological, cultural, geological, coastal, recreational, and scenic resources, where applicable. The presence of any threatened or endangered species shall be disclosed. 4 Natural hazard assessment including descriptive information of erosion, flooding, slope, tsunami, and volcanic hazards, where applicable. 5 A description of best management practices used during project construction and implementation (e.g., mitigation measures). 6 A description of the best management practices to be used during the lifetime of the project (e.g., mitigation measures). 7 A description of the conservation methods and applications to be used in the short term and long term (e.g., mitigation measures). 8 Description of existing uses and facilities, if any. 9 Description of proposed facilities and uses. including phases, if applicable. 10 Activity schedule <p>Project schedule including description of project sequencing from project construction to project completion and on-going maintenance plans, including a description and timing of natural resource monitoring and maintenance plans.</p> <p>A description of the annual reporting requirements.</p> <ol style="list-style-type: none"> 11 Any other information or data, as required by the department. 	<p>The applicable law to this CDUA is more accurately and clearly stated in the UH-TIO FOF/COL</p>

FOF/ COL #	Page	FOF/COL	Response
II.D.19.p	45-46	<p>HRS Chapter 343, Environmental Impact Statements articulates this public policy:</p> <p>The legislature finds that the quality of humanity's environment is critical to humanity's well being. that humanity's activities have broad and profound effects upon the interrelations of all components of the environment, and that an environmental review process will integrate the review of environmental concerns with existing planning processes of the State and counties and alert decision makers to significant environmental effects which may result from the implementation of certain actions. The legislature further finds that the process of reviewing environmental effects is desirable because environmental consciousness is enhanced, cooperation and coordination are encouraged, and public participation during the review process benefits all parties involved and society as a whole.</p> <p>It is the purpose of this chapter to establish a system of environmental review which will ensure that environmental concerns are given appropriate consideration in decision making along with economic and technical considerations.</p>	<p>Incomplete. Missing citation. See UH-TIO FOF No. 717. The applicable law to this CDUA is more accurately and clearly stated in the UHH-TIO FOF/COL. This CCH is about the approval of a CDUA under the eight criteria set forth in HAR § 13-5-30(c), not an EIS under HRS Chapter 343. The time to comment on and challenge the EIS has passed.</p>

FOF/ COL #	Page	FOF/COL	Response
II.D.19.q	46	<p>HRS § 344-3, Environmental policy, stipulates it shall be the policy of the State, through its programs, authorities and resources to conserve the natural resources and enhance the quality of life. Relevant parts of this statute are listed below:</p> <p>(1) Conserve the natural resources, so that land, water, mineral, visual, air and other natural resources are protected by controlling pollution by preserving or augmenting natural resources, and by safeguarding the State's unique natural environmental characteristics in a manner which will foster and promote the general welfare, create and maintain conditions under which humanity and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of the people of Hawaii.</p> <p>(2) Enhance the quality of life by:</p> <p>(C) Establishing communities which provide a sense of identity, wise use of land, efficient transportation, and aesthetic and social satisfaction in harmony with the natural environment which is uniquely Hawaiian; and</p> <p>(D) Establishing a commitment on the part of each person to protect and enhance Hawaii's environment and reduce the drain on nonrenewable resources.</p>	<p>Incomplete. Misleading. Partial quotation. The applicable law to this CDUA is more accurately and clearly stated in the UHH-TIO FOF/COL.</p>
II.D.19.r	46- 47	<p>HRS § 344-4 outlines guidelines for all agencies, in the development of programs, shall, insofar as practicable, consider in pursuance of the state policy to conserve the natural resources and enhance the quality of life. Relevant parts of this statute are listed below:</p> <p>(2) Land, water, mineral, visual, air, and other natural resources.</p> <p>(A) Encourage management practices which conserve and fully utilize all natural resources;</p> <p>(D) Encourage management practices which conserve and protect watersheds and water sources, forest and open space areas;</p> <p>(E) Establish and maintain natural area preserves, wildlife preserves, forest reserves, marine preserves, and unique ecological preserves;</p> <p>(F) Maintain an integrated system of state land use planning which</p>	<p>The applicable law to this CDUA is more accurately and clearly stated in the UHH-TIO FOF/COL.</p>

FOF/ COL #	Page	FOF/COL	Response
		<p>coordinates the state and county general plans; (3) Flora and fauna. (A) Protect endangered species of indigenous plants and animals and introduce new plants or animals only upon assurance of negligible ecological hazard; (B) Foster the planting of native as well as other trees, shrubs, and flowering plants compatible to the enhancement of our environment. (4) Parks, recreation. and open space. (A) Establish, preserve and maintain scenic, historic, cultural park and recreation areas, including the shorelines. for public recreational, educational, and scientific uses; (C) Promote open space in view of its natural beauty not only as a natural resource but as an ennobling, living environment for its people. (5) Economic development. (A) Encourage industries in Hawaii which would be in harmony with our environment; (D) Encourage all industries including the fishing, aquaculture, oceanography, recreation, and forest products industries to protect the environment; (10) Citizen participation. (A) Encourage all individuals in the State to adopt a moral ethic to respect the natural environment; to reduce waste and excessive consumption; and to fulfill the responsibility as trustees of the environment for the present and succeeding generations; and (B) Provide for expanding citizen participation in the decision making process so it continually embraces more citizens and more issues.</p>	
		<p>to fulfill the responsibility as trustees of the environment for the present and succeeding generations; and (B) Provide for expanding citizen participation in the decision making process so it continually embraces more citizens and more issues.</p>	

BOARD OF LAND AND NATURAL RESOURCES

FOR THE STATE OF HAWAII

IN THE MATTER OF

A Contested Case Hearing Re Conservation District Use Permit (CDUP) HA-3568 for the Thirty Meter Telescope at the Mauna Kea Science Reserve, Kaohe Mauka, Hamakua District, Island of Hawaii, TMK (3) 4-4-015:009

Case No. BLNR-CC-16-002

CERTIFICATE OF SERVICE

CERTIFICATE OF SERVICE

The undersigned hereby certifies that the foregoing document was served upon the following parties

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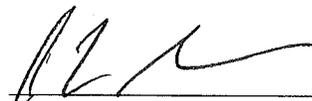
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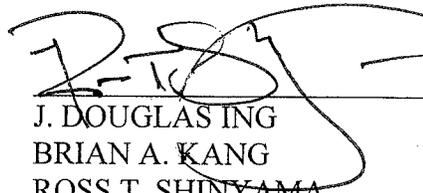
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